

689

55th annual meeting
of the american meat institute

THE NATIONAL **P**rovisioner

convention report issue

october 1st 1960



THE JOHN GREAR LIBRARY

OCT 3 1960



AMI meeting focuses on "new ideas and you"



**SAVE MAN HOURS-
LOWER OPERATING COST-
INCREASE EFFICIENCY**

WITH

GLOBE *Engineered*

MEAT and BY-PRODUCTS HANDLING EQUIPMENT

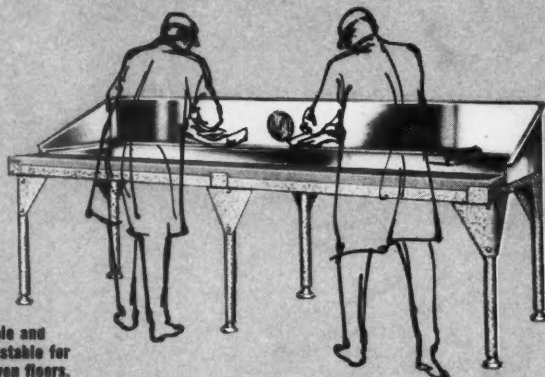
Man hours saved means increased production and profits. These benefits can be yours if you use Globe's complete line of trucks, tables, vats and miscellaneous handling equipment. Globe engineers have specially designed each item to help you move and store meat and materials quickly and efficiently.

Write to Globe today for complete details of a single item or group of items that will put you money ahead through greater economy and increased plant efficiency.



No. 7103 SAUSAGE MEAT TRUCK

Globe's Sausage Meat Truck offers ample capacity, handling ease and durability. (That's why it's used widely for transporting sausage meats from cooler to sausage grinding room.)



No. 12475

STATIONARY TRIMMING TABLE

Cutting, boning and trimming departments everywhere use Globe's versatile stationary trimming table. Top has removable and reversible sectional cutting boards. Legs are adjustable for leveling on uneven floors.



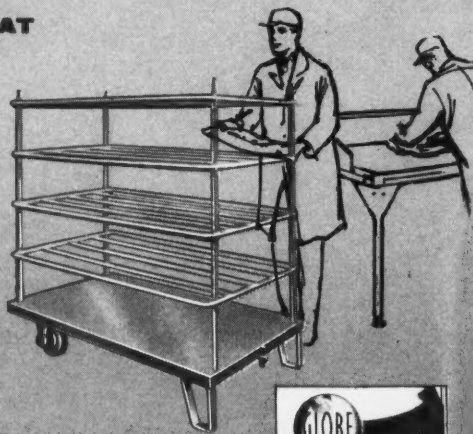
No. 7657 CURING OR SOAKING VAT

Globe's Curing or Soaking Vat is adaptable equally for curing, soaking or defrosting, or as a storage bin. Two guide angles on bottom enable lift truck to transport vat easily.

No. 7490 LOIN RACK

With Removable Sections

Regularly supplied with four removable sections, Loin Rack can be furnished with extra sections as specified. Ideal for transporting loins, ribs, chucks or rounds, it is moved with ease by lift truck. Rack can be equipped with four wheels, two wheels and two skids, or four skids, as ordered.



THE GLOBE COMPANY

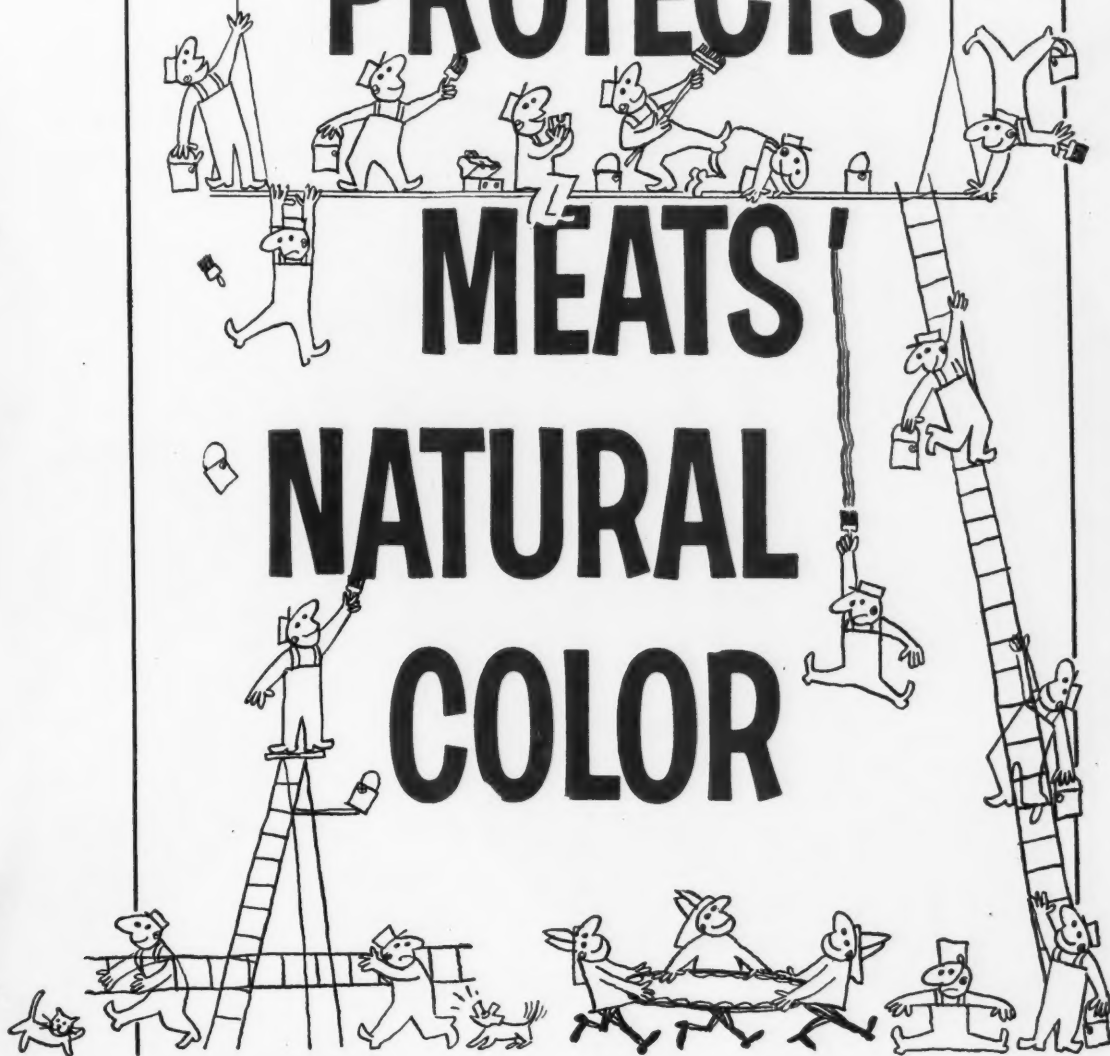
Serving the Meat Industry since 1914

4000 South Princeton Avenue • Chicago 9, Illinois

Globe's new 32-page Meat and By-Products Handling Equipment Catalog (No. 501) illustrates and describes the latest and best handling equipment known to the packing house industry today.



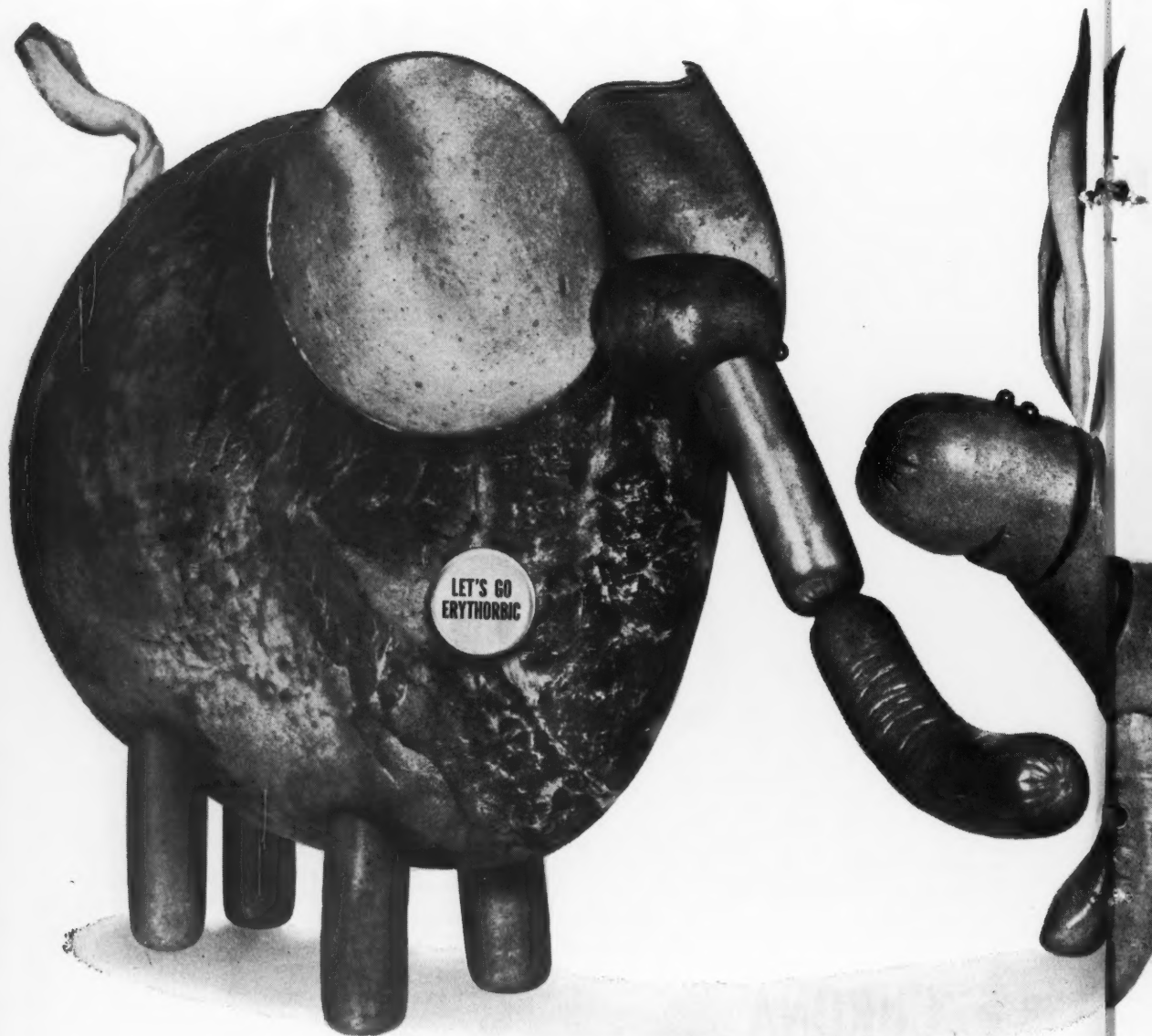
CURONA[®] PROTECTS MEATS' NATURAL COLOR



CURONA develops maximum color in your hams, bacons, briskets and cured comminuted meat products. For guarding color there is no better isoascorbate curing aid and antioxidant than Curona. Write today for a free sample and bulletin.



WALLERSTEIN COMPANY
Division of Baxter Laboratories, Inc.
Staten Island 3, N. Y.



★ IT'S UNANIMOUS!!! ★

Pfizer

BULK

ERYTHORBIC ACID

★ **IS THE TOP VOTE-GETTER** ★

FOR LOW COST, EASY-TO-HANDLE, COLOR PROTECTION!

★ Your franks, hams, bacon and other processed meats will get the housewife's vote in the daily sales election when they are protected from color-fading with efficient, inexpensive Pfizer

Erythorbic Acid or Sodium Erythorbate.

Pfizer Erythorbic Acid and Sodium Erythorbate are sold in easy-to-handle bulk form, suited to high speed processing equipment.

Just add a small amount of erythorbic acid or sodium erythorbate to the chop for franks, bolognas and luncheon meats. Spray a solution of it on pre-sliced hams and bacon. Add it to the pump pickle for hams or to the curing pickle for corned beef. Whatever the method used you can count on a product that will get your customers' vote because it retains its original eye-appeal and sales-appeal.

CHAS. PFIZER & CO., INC., CHEMICAL SALES DIVISION



Science for the world's well-being
Quality Ingredients for the Food Industry for Over a Century

630 Flushing Avenue, Brooklyn 6, New York
Branch Offices: Clifton, N. J.; Chicago, Ill.; San Francisco, Calif.; Vernon, Calif.; Atlanta, Ga.; Dallas, Tex.; Montreal, Canada

VOTE HERE for ★★★★★★★★★★★★★★

☐ *Technical Bulletin 100, Pfizer Products for the Meat Industry*

And a working sample of:

☐ *Pfizer Erythorbic Acid* ☐ *Pfizer Sodium Erythorbate*

NAME _____

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"I buy thousands of lambs fed on the MOREA liquid feed program"

says Paul McFarland, Utah Meat Packer

"MOREA lambs have a very desirable carcass with whiter, better textured fat," says Mr. McFarland, President of McFarland Incorporated, meat packing firm of South Salt Lake City, Utah.

"These lambs do not have oily fat," Mr. McFarland adds. "I have bought thousands of lambs fed on the MOREA liquid feed program and they are excellent."

MOREA is a registered trade-mark of Feed Service Corporation.

"We have also handled some beef cattle fed on MOREA supplement," Mr. McFarland says, "and have found that the beef carcasses are much better when fed with MOREA."

THE BIG NEWS among packers and packer-feeders today is the quality, flavor and good retail sales of

meat from lambs and cattle produced on the MOREA feed program. If you have a feedlot operation or feed animals on contract, look into the benefits of MOREA supplement. Or contact us for the name of your nearest mixer-distributor if you want to locate lambs and cattle fed on the MOREA supplement program.



Feed Service Corporation
Crete, Nebraska

U. S. Industrial Chemicals Co.
99 Park Ave., New York 16, N. Y.

Everyone want ones!

**DRY SAUSAGE
FRESH SAUSAGE**

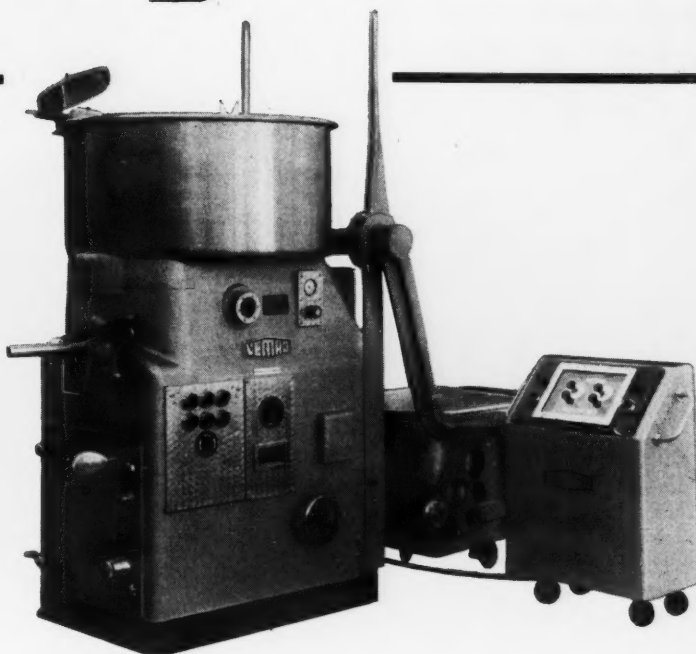
ONLY ONE CONTINUOUS
STUFFER WILL DO BOTH
JOBS EQUALLY WELL

VERMAG

G-250

The G-250 can be set up in minutes simply by connecting it to an electrical outlet—no water or air connections necessary.

Let us show you how this outstanding equipment can give you better products, increased yield and big labor savings.



- No air pockets in the finished product, due to vacuum attachment
- Improves product appearance
- Control of filling pressure by new stuffing system

- No smearing
- Utilizes your casings much better
- Savings in time and money by eliminating vacuum mixer

- Reduced drying time on dry sausage
- Has its own labor-saving loading device
- Simplicity and ease of operation and maintenance

WRITE OR PHONE:

ROBERT REISER & CO., INC.

FOOD EQUIPMENT DIVISION

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Hubbard 2-1225

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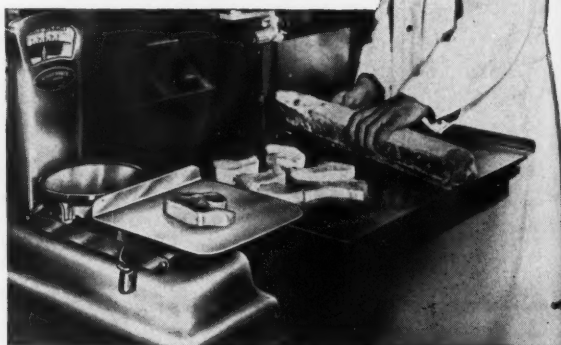
S. BLONDHEIM CO., 425 Third St.,
San Francisco, Calif., SUtter 1-1892

Exact Weight® Scales for Portion Control



**MODEL 273 for
Predetermined
Weighing**

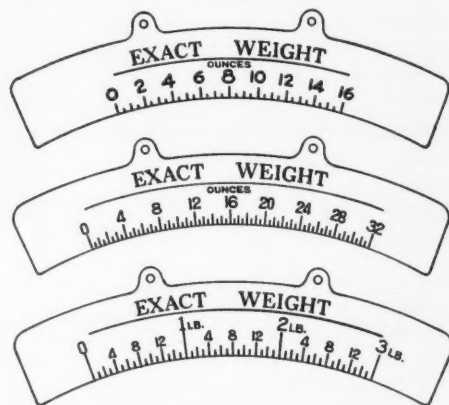
Meat cuts are checkweighed with fast, dependable accuracy on this predetermined-weight scale. Weight indication in fractional ounces and end tower design for straight line production operations make weighing quick and easy. Indicator travel is 1 in. over and under by 1/4-oz. graduations, or 2 ozs. over and under by 1/2-oz. graduations. Capacity 12 lbs. Rugged construction . . . requires minimum bench space . . . and weighs in normal out-of-level positions. Special corrosion-resistant finish at no extra cost. Request Form 3304.



MODEL 276 for Catch Weighing

This Exact Weight Scale is instantly adaptable to various meat cuts of different weights. It eliminates the need for calculating excess or shortage in weight.

For catch weighing of random cuts, direct-reading dials can be furnished as illustrated below. Extra wide tower provides 5-inch dial travel for: 0 to 16 oz. by 1/2 oz., 0 to 32 oz. by 1 oz., or 0 to 3 lbs. by 1 oz.



Like all Exact Weight scales, Model 276 is fast acting with adjustable hydraulic damping to provide quick and accurate indication. A special corrosion resistant finish is provided at no extra cost. It weighs in normal out-of-level position and is not readily affected by machinery vibration. Write for special catalog for meat packers.

SHADOGRAPH® SCALE



Bacon and other packaged meats are weighed faster with the Shadograph. Extremely accurate readings . . . parallax is eliminated. Capacity 2 pounds with 1/40-oz. visible indication. Two ounces of weight move indicator four inches.

Request Form 3294

**MODEL
4133**



THE EXACT WEIGHT SCALE CO.

915 W. FIFTH AVE., COLUMBUS 8, OHIO

In Canada: 5 Six Points Road, Toronto 18, Ont.

Sales and Service Coast to Coast

THE NATIONAL PROVISIONER, OCTOBER 1, 1960





Unmatched for quality and uniformity!

AVISCO® CASINGS

No irregular shapes when you use Avisco transparent casings. They give retailers the uniform, full slices they want for maximum appetite appeal and profits. What's more, from casing to casing there's always uniformity in size. And *built-in controlled*



stretch gives greater ease in stuffing—greater dependability in processing. Add all these advantages to the sparkling clarity and beautiful printability of Avisco transparent casings and you'll find them unmatched for sales appeal and economy.

AMERICAN VISCOSÉ CORPORATION, FILM DIVISION,

426 WEST RANDOLPH STREET, CHICAGO 9, ILLINOIS

THE NATIONAL PROVISIONER, OCTOBER 1, 1960

**Because we're our own
toughest customer...**

HORMEL

is the word for

GELATIN!

NO one could be fussier about gelatin than Hormel. We need exactly the right kinds, the highest quality ... for our famous canned hams and loaf products.

WE insist on just the right strength gelatin for easy slicing. We demand sparkling clarity, too. And we require exactly the right gelatin for each type of product.

SO, to get what we want in gelatin ... we produce it. We make gelatin for ourselves, *and for other packers.* (Matter of fact, ours happens to be the only gelatin plant within a meat inspection plant.)

IF you are also a "tough customer", we'd like to serve you. We'll be happy to share with you the experience we've gained in our years as both producer and user of gelatin.

For more information, write

GEO. A. HORMEL & CO., Austin, Minn.

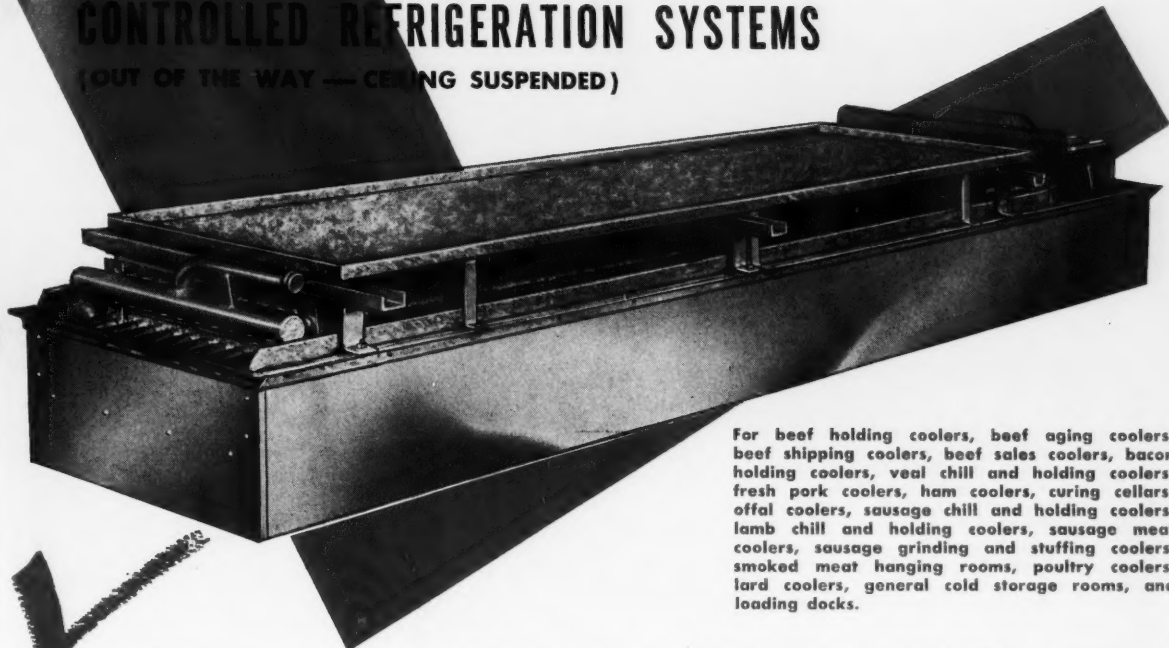


HORMEL

GEBHARDTS SERIES 100

CONTROLLED REFRIGERATION SYSTEMS

(OUT OF THE WAY — CEILING SUSPENDED)



For beef holding coolers, beef aging coolers, beef shipping coolers, beef sales coolers, bacon holding coolers, veal chill and holding coolers, fresh pork coolers, ham coolers, curing cellars, offal coolers, sausage chill and holding coolers, lamb chill and holding coolers, sausage meat coolers, sausage grinding and stuffing coolers, smoked meat hanging rooms, poultry coolers, lard coolers, general cold storage rooms, and loading docks.

MORE COIL:

There is more effective coil surface per ton of refrigeration in a GEBHARDT Unit than any other cooling unit made.

LESS SHRINK:

Only GEBHARDTS have an internal water spray plate that keeps the relative humidity in balance with the product. This construction is fully patented.

NO BLOWING:

GEBHARDTS deliver a constant, uniform, gentle circulation of air throughout the entire cooler. There are no "dead" spots.

WASHED AIR:

The patented construction of GEBHARDTS wash the air that goes through the unit free from bacteria, molds, and odors.

CLEAN AND SANITARY:

The inside of a GEBHARDT Unit is constantly being scrubbed by water under air pressure, so that it is impossible to accumulate in the unit at any time slime, mold, bacteria, or odors. We have units that have operated for more than 20 years and are just as clean inside as they were 20 years ago when they were installed.

LESS MAINTENANCE:

GEBHARDTS require practically no attention, because they do not use messy brine, fussy controls, or V-belt drives. There are no slipping belts to tighten or replace.

MORE EXPERIENCE:

The experience behind the design and application of GEBHARDT equipment goes back three generations in the meat industry. The men who engineer the application of this equipment are "meat men." They have known the packers' problem for years. This engineering department will gladly make recommendations on your refrigeration requirements without any obligation.

Only GEBHARDTS give you Controlled Humidity . . . Controlled Temperature . . . Controlled Circulation . . . Air Purification!

Sales and Service in all principal cities.



GEBHARDT'S CONTROLLED REFRIGERATION SYSTEMS

Manufactured by Advanced Engineering Corp.

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TELEPHONE: FLAGSTONE 2-2800

SALES-WINNER!

Burk's bacon and franks in Du Pont cellophane are fast sellers in the Philadelphia area! Cellophane's clean, sparkling transparency shows the meats at their appetizing best...the film is greaseproof, dustproof. And Du Pont cellophane keeps meat just as good as it looks. With Du Pont cellophane, Burk's also gets trouble-free performance on high-speed packaging machinery—and neat, tightly sealed packages. Find out how you, too, can win more sales, package more profitably with Du Pont cellophane. Talk to your Du Pont Representative or Authorized Converter. Du Pont Co., Film Dept., Wilmington 98, Delaware.

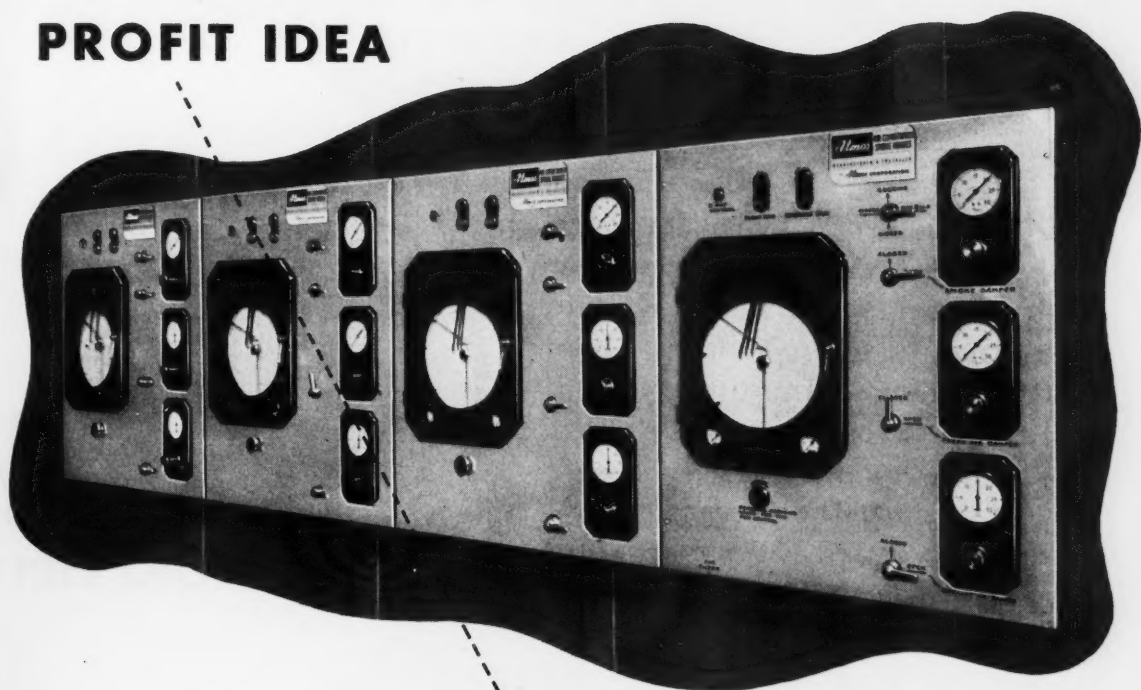


BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

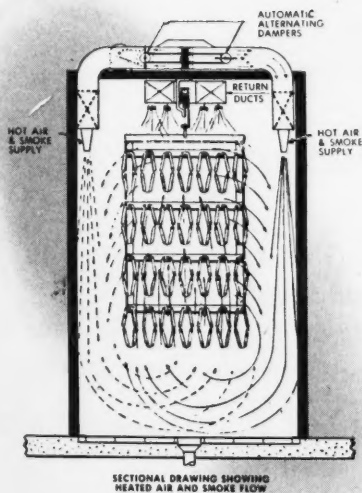
DU PONT
cellophane



PROFIT IDEA



ATMOS can make your smoking completely automatic!



Don't waste time and money in handling volumes of frankfurters, bologna and smoked meat by hand.

ATMOS AUTOMATIC SMOKEHOUSES will finish your franks in about 60 to 75 minutes . . . your large bolo in about five hours . . . your ready-to-eat hams in ten to fourteen hours, and do it automatically without rehandling cages or trucks and without any rework.

If you're planning to build, modernize, or if you're simply open to new ideas—call ATMOS. A team of experienced engineers are willing and able to help you. There's no obligation for consultation.

ATMOS . . . Serving these famous names and many more:
Hormel - Merkel - Krauss - Nebergall - New England Provision - Boston Sausage - Los Angeles Meat - William Davies - Canada Packers

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**SV for the manufacture
of hams by muscular or arte-
rial brine injection.**

Glutamal SV is a well balanced compound of active materials which has been developed over many years of research exclusively for the use in ham production by brine injection method. The use of Glutamal SV in all ham producing countries of the world proves its reliability and success. The unequalled simplicity and speed with which Glutamal SV dissolves in cold water ensures complete distribution in the brine and safe application. Glutamal SV does not crystallize, does not form sediments or lumps, and thereby guarantees a smoothly flowing brine injection.



From Old Germany

Quality creates confidence

Guaranteed to increase the yield and quality of your meat and sausage products regardless of equipment or kind of meat used!

Astounding achievement used all over the world now brings America finer meat products for the consumer, more sales and profits for the manufacturer.

Every day 5000 tons of Meat Products are manufactured with "Glutamal" in Europe

Never before available in the United States, Glutamal has been used throughout the world to insure greater yields, greater profits to meat and sausage manufacturers, offer greater dollar value to consumers. Now, Glutamal is yours to use right here in America. Write now for complete information on how Glutamal can help you achieve a better product at lower cost with more ultimate profits!

Distributed by Milwaukee Spice Mills Milwaukee 7, Wisconsin

STEMMLER · COLOGNE · PARIS · NEW YORK



Glutamal

Germany, Land of the Master Sausage Craftsman

Better yields on tinned hams use

Glutamal SV. Check these benefits!

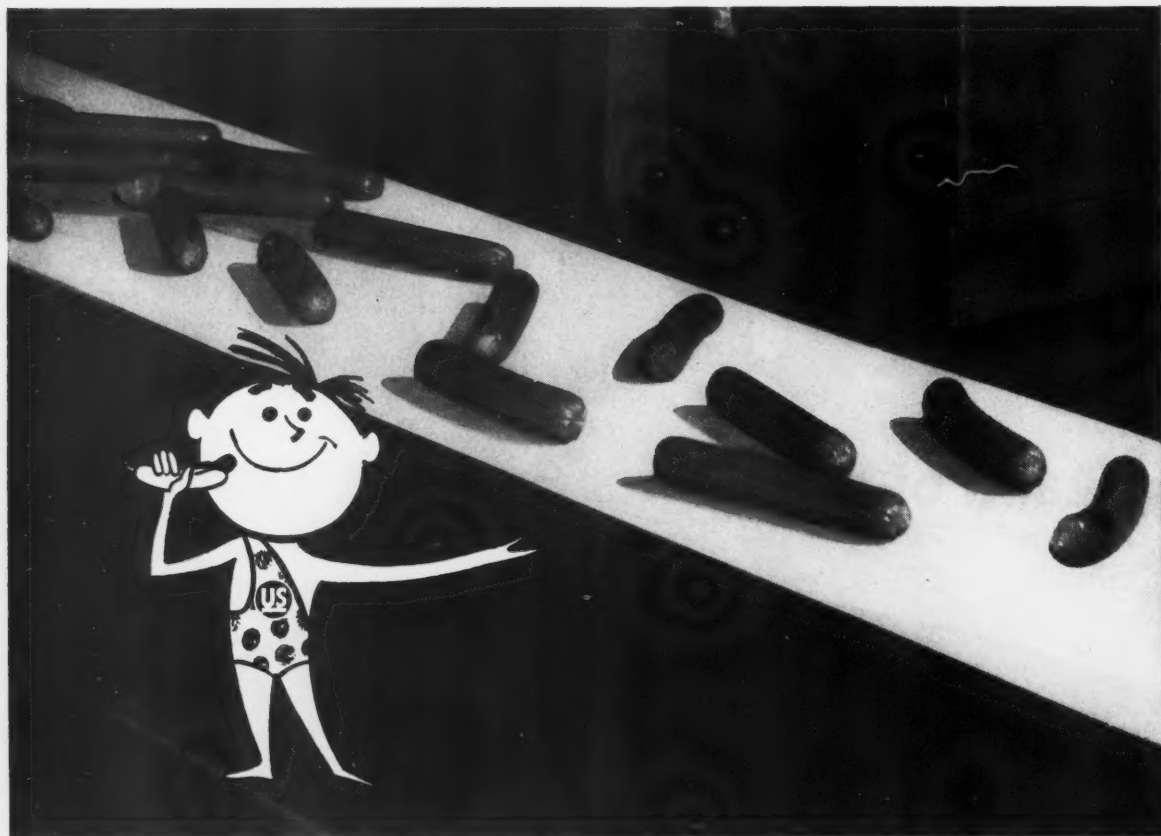
Reduces shrinkage, weight loss in cooking. Enhances binding of natural juices. Reduces formation of jelly to a minimum. Provides anti-oxidizing effect. Improves color of the end product.



Europe



LITTLE GIANT CONVEYOR BELTS



FOR OVER 4 YEARS U.S. Little Giant Conveyor Belts have been working at Wilson & Co.

At the Albert Lea, Minn. plant of Wilson & Co., this U. S. Little Giant® Belt has been carrying franks from the skinless frank peeling machine to the packing personnel, and the packaged products to the boxing station.

Says Leo E. O'Neal, plant superintendent: "The wieners have to be handled gently. In 4 years' service, U.S. Little Giant Conveyor Belt has behaved perfectly. No repairs have ever been needed—therefore no downtime. The belt is easy to keep clean, needs minimum maintenance and is reasonable in cost. Shipping and processing costs are a major production charge in a

packing plant. This belt has cut these costs downward. The belt is safer than metal—there are no openings for personnel to get their fingers into."

This evidence of the performance of Little Giant Belt is another proof of "U. S." authority in materials handling. Put Little Giant to work in your plant.

• • •

When you think of rubber, think of your "U. S." Distributor. He's your best on-the-spot source of technical aid, quick delivery and quality industrial rubber products.



Mechanical Goods Division

United States Rubber

WORLD'S LARGEST MANUFACTURER OF INDUSTRIAL RUBBER PRODUCTS

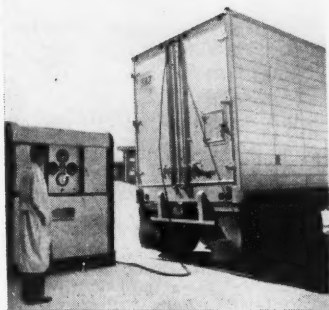
Rockefeller Center, New York 20, N.Y.

In Canada: Dominion Rubber Company, Ltd.

BLOOM **Excellent**
SURFACE CONDITION **Dry**
FIRMNESS **Excellent**
SHRINKAGE **less than 1%**

These statements were taken from a report on the condition of a load of pork carcasses after a 34 hour trip in a reefer truck with its mechanical refrigeration unit supplemented by Pureco CO₂ Blast Chilling immediately after loading. The report also stated that "fat was white and firm . . . meat arrived at an ideal cutting temperature (36°F.) thus, no delay in cutting room..."

...WITH PURECO CO₂ ~~"BLAST CHILLING"~~



Warm Moist Air Replaced By Cool Dry Vapor.

Pureco CO₂ Blast Chilling flushes out the warm moisture-laden air and replaces it with cold dry vapor. Temperature "pull-down" takes only seconds. Meat is kept cold and dry. Mechanical units operate better and are more economical because they don't "ice-up" as quickly.

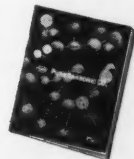
No Special Equipment Needed.

Pureco CO₂ Blast Chilling needs no special equipment . . . it works with mechanical units . . . hold-over systems or "DRY-ICE". Blast Chilling units are supplied and maintained on the customer's premises by Pure Carbonic.

Have a Trial "Blast Chilling" Demonstration.

Let Pureco demonstrate Blast Chilling to you at your plant under your working conditions with no obligation on your part. Call your Pureco representative for details or write:

New Pureco booklet "How Carbon Dioxide Serves You". Write for free copy.

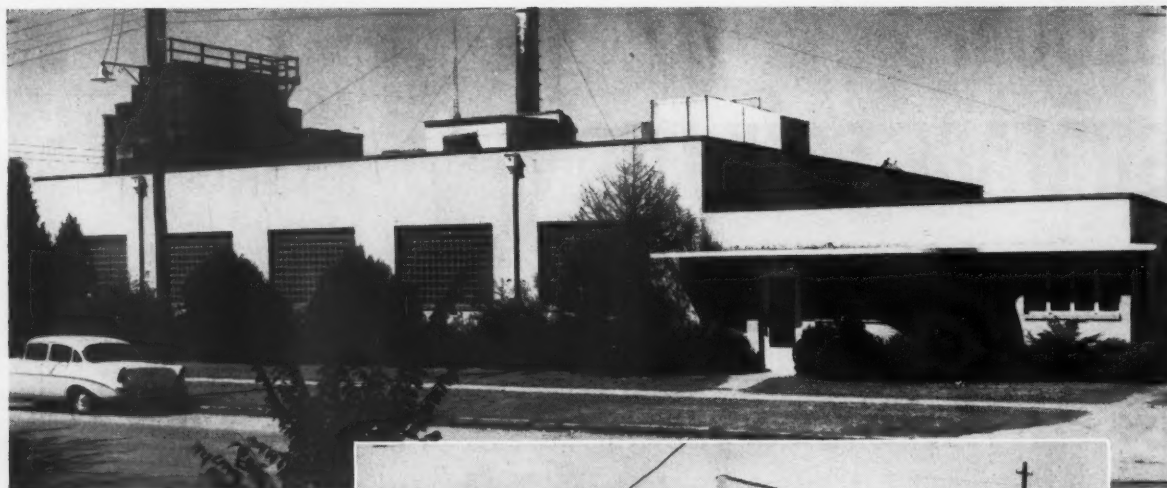


PURE CARBONIC

Pure Carbonic Company, A Division of Air Reduction Company, Incorporated
 Nation-Wide Pureco CO₂ Service-Distributing Stations in Principal Cities
 General Offices: 150 East 42nd Street, New York 17, N.Y.

AT THE FRONTIERS OF PROGRESS YOU'LL FIND AN AIR REDUCTION PRODUCT

THE NATIONAL PROVISIONER, OCTOBER 1, 1960



ULTRA-MODERN dairy (above), is Dottley's source of supply for Dot-Lac, Sodium Caseinate and Lacto-Albumin.

SUPERB QUALITY natural and soluble spices are blended in the spotless mixing room of Dottley's Merchandise Mart (right), your most dependable source of supply for top-quality products.



Two Reasons Why "DOT BRANDS" Are Traditionally The TASTE LEADER

Fine facilities help to make fine products, and Dottley's offers you the most modern facilities. An ultra-modern dairy, unsurpassed anywhere for processing pure sodium of Caseinate, Lacto-Albumin and Dot-Lac, is our source of supply for these products.

Our spotless new mixing room provides us with an ideal place to blend the finest natural and soluble spices, prepared in the Dottley tradition of taste leadership for your trade demands.

These fine plants are two of the reasons why you

get only the finest from Dottley's Merchandise Mart. Add the fact that every product is prepared with scrupulous care from the very best ingredients and you'll see why it makes good sense to choose Dottley's products.

Why not test our merchandise? We'll be glad to send you a workable sample of our natural or soluble spices or any of our products at any time. Just call or wire us collect and they'll be on their way to you. Then you can prove to your own satisfaction that Dot Brands are taste leaders. Call or wire today.

DOTTLEY'S MERCHANDISE MART, INC.

BLENDERS OF NATURAL AND SOLUBLE SPICES

104 Pine Street, McGehee, Arkansas

Telephones 8:30 A.M. to 4 P.M. • CAnal 2-4057 or 2-4097 • Nights: CAnal 2-4115

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offers same
day service
on most
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completely indexed
124 pages
full descriptions
performance data
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It's your guide to improved methods
and equipment. Supplements are
published frequently to give you
the latest information on both
equipment and supplies.
Send for your copy today.



5 BIG KOCH EXTRAS . . . FOR YOU!

1. Generations of Experience

You benefit from the technical know-how and experience gained by KOCH during its generations of serving the meat industry for over three quarters of a century. KOCH personnel understand meat processing and meat packing operations. You can count on KOCH for personal attention and prompt service.

2. Same-Day Shipment

KOCH stocks thousands of items in its own warehouse, ready for same-day shipment. Your order gets immediate attention as soon as it's received. Every KOCH worker gears his job to filling orders promptly and accurately. Most supply orders are shipped within 24 hours.

3. Creative Engineering Service

At any time, you are welcome to consult with our qualified professional engineers or food technologists. Your request will receive prompt attention whether it be the planning of a new plant, the design of special

equipment, or trouble-shooting a plant problem. KOCH offers such services to you without charge or obligation.

4. One Price for Everybody

You always can be sure of buying at a fair price from KOCH. Prices are clearly stated in the KOCH Catalog. There are no fake discounts to confuse you. You do get the price advantage of high volume production and sales. There are many quantity price breaks in the KOCH Catalog.

5. A Definite, Written Guarantee

You can depend on KOCH for a written guarantee on all products. Machinery, capital equipment, and special-order merchandise are guaranteed against defective parts or workmanship. Other merchandise carries a one year guarantee of satisfaction or your money back. KOCH further guarantees that everything in its catalog is honestly described and that you will receive the service you have a right to expect.

KOCH
EQUIPMENT CO.

2520 Holmes St. • Kansas City 8, Mo., U. S. A.
TWX: KC 225 Victor 2-3788

KOCH

high speed cutters

Schnellkutter

**FAST!
CUTS COMPLETE SAUSAGE EMULSION WITH
AMAZING SPEED**

Cuts fresh or frozen meat without pre-grinding. Does work of grinder, silent cutter, mixer, and vacuum mixer. Cuts, mixes, and emulsifies simultaneously.

Two-speed motor for versatile operation. Slow speed (1750 rpm) for pre-cutting frozen meats and for making dry sausage, pork sausage, and hamburger. High speed (3500 rpm) for fine emulsions for liver sausage, bologna, or wieners.

Cutting blades operate only when cover is closed. Safety opening in cover permits adding ingredients during operation.

Quality of sausage is superior to that produced by an ordinary cutter. Meat protein stays cool under fast cutting, therefore, holds more water. Proved up to 2% less shrink in smokehouse. Fat retention is excellent. Fat separation seldom occurs even when large amounts of fat are being worked.

Available in 50, 80, and 125-lb. capacity. Larger machines can be equipped to cut meat under vacuum. Vacuum-cut sausage cures faster, stuffs tighter, has fewer air pockets, and has longer shelf life.

Hourly output is two to three times that of conventional silent cutter.

QUICK FACTS ON THE SCHNELLKUTTER

1. Complete emulsion in 2 to 4 minutes.
2. Initial and operating costs are low because of direct drive.
3. Quality is improved, muscle and edible offal are reduced to microscopic size.
4. Vacuum operation available as optional extra on larger machines.
5. Bowl tips to unload.
6. Sausage batter binds more water and smokehouse shrink is reduced up to 2%.
7. The Schnellkutter needs little floor space.
8. Design and construction are sanitary; machine is made entirely of corrosion-resistant metals. A few seconds operation with warm water cleans machine.



125-lb. capacity (60-liter) machine shown with bowl in half-tipped position. Machine has 17/20—1/2-HP. 1750/3500-RPM motor for operation on 220-v., 60-cy., 3-ph., current. 1/2-HP reversible gear motor mounted on the cover turns the mixing baffle at 28-rpm.

see the **KOCH** catalog for a complete line of meat processing equipment.



KOCH mikro-cut

- Super-fine cuts as smooth as cream
- Works on new cutting principle
- Easy to clean, disassemble

Produces extremely fine creams and emulsions from ground meats. Powerful suction creates a column that pulls material into cutting zone and propels it out through discharge. Output varies from 1500 to 8000-lb. per hour depending on model and thickness of emulsion.

Used to cut tripe, lips, and skins, as well as super-fine sausage emulsions.

Superior to existing systems as to output, cleaning, service life, and initial price.

Stock Number	..... No. 4137	..... No. 4149
Model	..... MC 12	..... MC 30
Motor	..... 12-HP	..... 30-HP
Min. hrly. output	..... 1500-lb.	..... 4600-lb.
Max. hrly. output	..... 2700-lb.	..... 8000-lb.

KOCH

EQUIPMENT CO.

2520 Holmes St. • Kansas City 8, Mo., U. S. A.
TWX: KC 225 Victor 2-3788

KOCH

humane slaughter equipment



KOCH cash-x pistol

The most
widely used
Penetration
Stunner



SIMPLE OPERATION . . .

The Cash-X Pistol is easy to use. New operators become experts in an hour or so. Allows you to comply with humane slaughter laws.

DEPENDABLE . . .

The Cash-X is the mechanical stunning device used by thousands. Write for name of users near you. The Cash-X Pistol is the most widely used humane stunner.

VERSATILE . . .

Regular Cash-X will stun any animal over 150-lb. Short Cash-X handles animals of less than 150-lb. It is ideal for lambs and calves.

LOW-COST . . .

Initial and operating costs are nominal.

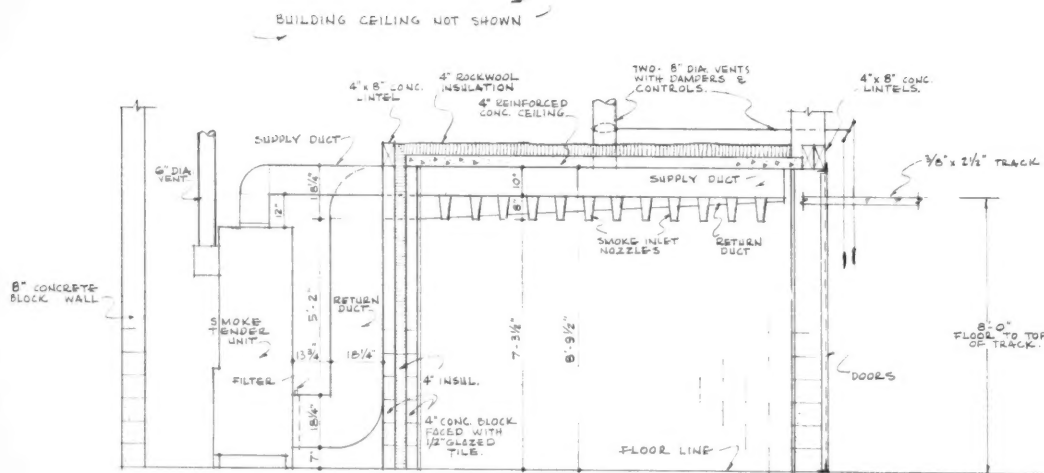
KOCH

EQUIPMENT CO.

2520 Holmes St. • Kansas City 8, Mo., U. S. A.
TWX: KC 225 Victor 2-3788

KOCH

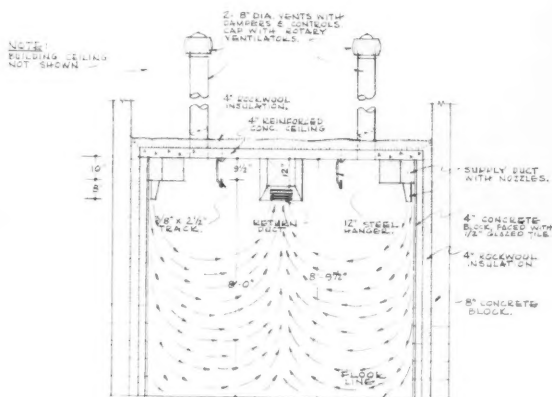
smoking equipment at work



Elevation showing side view of smokehouse with Smoke-Tender Unit



Hams coming out of smokehouse. Note input hot air nozzles on ductwork upper right. Out-flow ductwork is in upper center.



Section through Smokehouse showing airflow pattern.

DESIGN OF A TYPICAL SMOKE-TENDER UNIT INSTALLATION

This page shows a typical four cage smoke house served by a Smoke-Tender Unit. The Smokehouse is masonry tile. It was built by the customer from plans supplied by Koch.

The smokehouse has ductwork to and from the

Smoke Tender Unit. The Smoke Tender Unit provides heat, smoke, and forced circulation under automatic control. It is a package unit that can be adapted to most two or four cage smokehouses.

KOCH

EQUIPMENT CO.

2520 Holmes St. • Kansas City 8, Mo., U. S. A.
TWX: KC 225 Victor 2-3789

pink *and* plump

extra-bright pink bloom and savory flavor



See Page 3/Ma

See those pink plump beauties in the pan? That's what we mean! MAYER'S WONDER PORK SAUSAGE SEASONINGS give you the finest attributes of natural spices and soluble seasonings to provide extra-bright pink bloom and a fine, full flavor. Ask the "man from Mayer" or write for batch-size test sample. Just tell us the size of your production block and whether you want regular strength, light sage, no sage, or southern style; also with or without Cracked Red Pepper.

SPEAKING OF SAGE

Our sage is the finest Yugoslavian quality; perfect silvery leaves from the world's best crops, grown along the Dalmatian coast. Of course we pay more for these cleaner, fresher colored leaves. But they alone, of all the world's sage, translate into the perfect sage flavor for our blends.

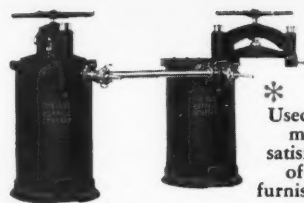
H. J. MAYER & SONS CO., INC.

6813 South Ashland Avenue • Chicago 36, Illinois

Plant: 6819-27 South Ashland Avenue

In Canada: H. J. Mayer & Sons Co. (Canada) Limited, Windsor, Ontario

CONTINUOUS STUFFING



*
Used by leading sausage
makers with complete
satisfaction. Name
of a user nearest you
furnished on request.

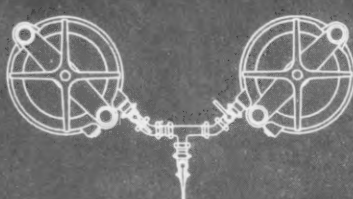
the proved* way
no mechanical problems
no heating or smearing of meat

A COMBINATION THAT CAN'T BE BEAT

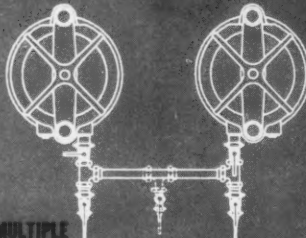
By connecting two stuffers with a BUFFALO STUFFER INTERCONNECTION DEVICE, stuffing is made continuous. No time is lost in reloading. The flow of meat out of the stuffing tube or tubes is uninterrupted. This simple, proved, dependable method of continuous stuffing greatly reduces operating costs where large quantities of a single product are involved.



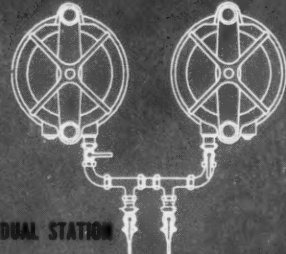
STANDARD BUFFALO STUFFER INTERCONNECTION DEVICES



SINGLE STATION



DUAL OR MULTIPLE



DUAL STATION

Buffalo Sausage Machinery
gets all its testing in our plant
...so it can spend all its time
producing in yours.



SEND FOR
catalog and quotation
or call your Buffalo
representative.

Buffalo



the most complete line of converters...stuffers...grinders
...mixers and related sausage machinery

John E. Smith's Sons Co.
50 Broadway Buffalo 3, N. Y.

Sales and Service Offices in Principal Cities

THE NATIONAL PROVISIONER, OCTOBER 1, 1960

NEW STYLE KNIVES*

put new life in
older style cutters

- they cut faster
- they cut cooler
- they stay sharp
longer
- they last longer

*Knives are made of
a special analysis stainless
steel highly polished to
minimize friction. They reduce
roll back of meat and
can process frozen meat if
thawed for 12 hours.

Buffalo
STAINLESS STEEL KNIVES
...for 10 Models of Buffalo Cutters

Silent Cutter Model No.	Converter Model No.
70-X	86-X
70-B	58-X
65-X	49-X
65-B	44-X
54-B	
49-B	
44-B	
43-B	
38-B	
32-B	

Older cutters spring to life with these unusual knives. They're new
...they're thoroughly tested... **they're designed specifically for
your Buffalo cutter.** No other knife can compare with them in price
and performance. They're the next best thing to a brand new Buffalo
converter. Try a set and see for yourself!



Buffalo

...the name you can depend
on for the newest and best in
sausage machinery

JOHN E. SMITH'S SONS CO., 50 Broadway, Buffalo 3, N. Y.

**ORDER
TODAY**

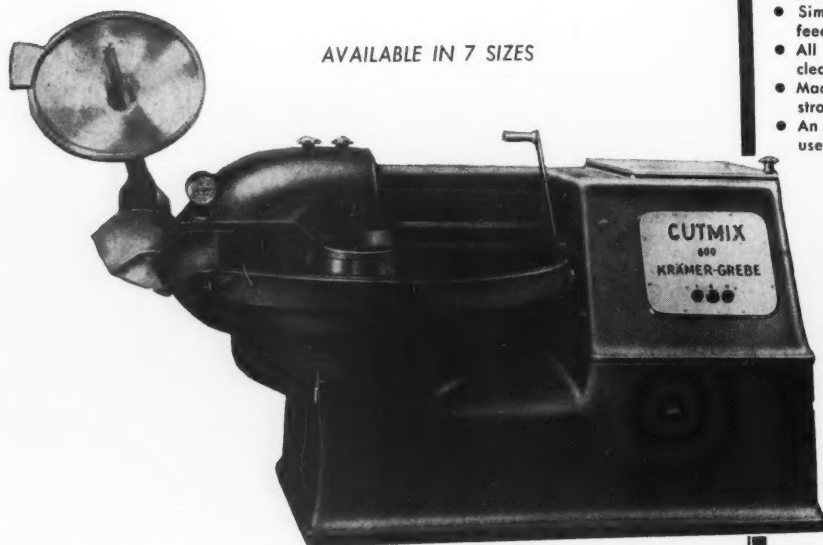
Model No. _____	No. Sets _____
Model No. _____	No. Sets _____
Model No. _____	No. Sets _____

Name _____ Title _____
Company _____
Address _____ NP

THE NATIONAL PROVISIONER, OCTOBER 1, 1960

IMPROVE QUALITY—REDUCE COSTS INCREASE YIELD IN YOUR SAUSAGE OPERATION

Ask About Our Machine
With New Stainless Steel Bowl



AVAILABLE IN 7 SIZES

CUTMIX and only CUTMIX has the Exclusive New Patented Cover and Knife design which is essential to produce a superior pork sausage chop and a finer emulsion.

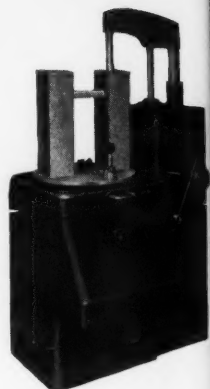
CUTMIX has no equal in performance. CUTMIX will speed production and give you a superior product at a great profit to you. CUTMIX will give you the finest emulsion, pork sausage, dry sausage and more tender hamburger.

Available in 7 sizes . . . 65 to 640 lbs. Powerful 2-speed motor . . . Push button controls . . . can be set up with 3, 6, 9, or 12 knives.



VACU-CUTMIX

FAMO DICER



- STRIPS
- SLICES
- CUBES
- DICES

- The hydraulically controlled FAMO DICER cuts, dices, slices or strips all kinds of meats and vegetables.
- Even frozen bacon can be cut by means of strongly made saw-type knives.
- Simple operation—ininitely variable hydraulic feed.
- All knives are stainless steel for absolute cleanliness.
- Machine is automatically stopped after each stroke, protecting all parts subject to wear.
- An excellent production machine with many uses.

NO OIL OR GREASE FITTINGS
IN PRODUCT ZONE

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Long Life

LINE

Meat Chopper Plates are forged in one piece. Made for all sizes and all makes of grinders. The standard of quality for over 30 years.

THE DUZ-MORE KNIVES

Reduce cutting cost and increase grinder efficiency. Will cut over 300,000 lbs. of meat without resharpener. Easy to clean, absolutely sanitary.

"Long Life"

STAINLESS CUTTER KNIFE

GUARANTEED TO OUT PERFORM ANY OTHER KNIFE IN PRODUCTION USE

- AVAILABLE FOR ALL MAKES OF CUTTERS
- LESS AIR IN PRODUCT
- 25% FASTER
- MAXIMUM WORKING CUTTING EDGE
- "LONG LIFE" MATERIALS AND WORKMANSHIP ARE GUARANTEED



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BRECHTEEN

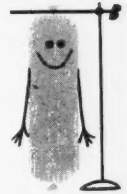
the manufactured casing that's a "natural"

M-m-m... that wonderful smoked flavor! It's a "natural" with Brechteen! The amazing Brechteen casing gives you the full porosity of *natural* casings along with the many advantages and economy of *manufactured* casings. It's extruded to your exact specifications, pre-tied with hanger knot. Always uniform... no waste... cuts drying time... can be pre-sewn, pre-printed, pre-tied. Brechteen is your ideal casing for all types of sausage—fresh, smoked, cooked and dry. Also for slicing products and rings. Write today for full information.

Service by qualified sausage technician available.



SAVES YOU MORE



ALWAYS UNIFORM



GREATER SMOKE PENETRATION



NO WASTE



CUTS DRYING TIME 50%



CAN BE PRE-SEWN, PRE-PRINTED, PRE-TIED

THE BRECHTEEN CORPORATION • 4706 S. ADA STREET • CHICAGO 9, ILLINOIS

In Canada: Independent Casing Company of Canada, Ltd., 1100 Craig Street East, Montreal 24, Quebec

In Latin-America: Address The Brechteen Corporation, 4706 S. Ada St., Chicago 9, Ill., U.S.A.

SMOKEHOUSES by



THE EMBLEM OF QUALITY

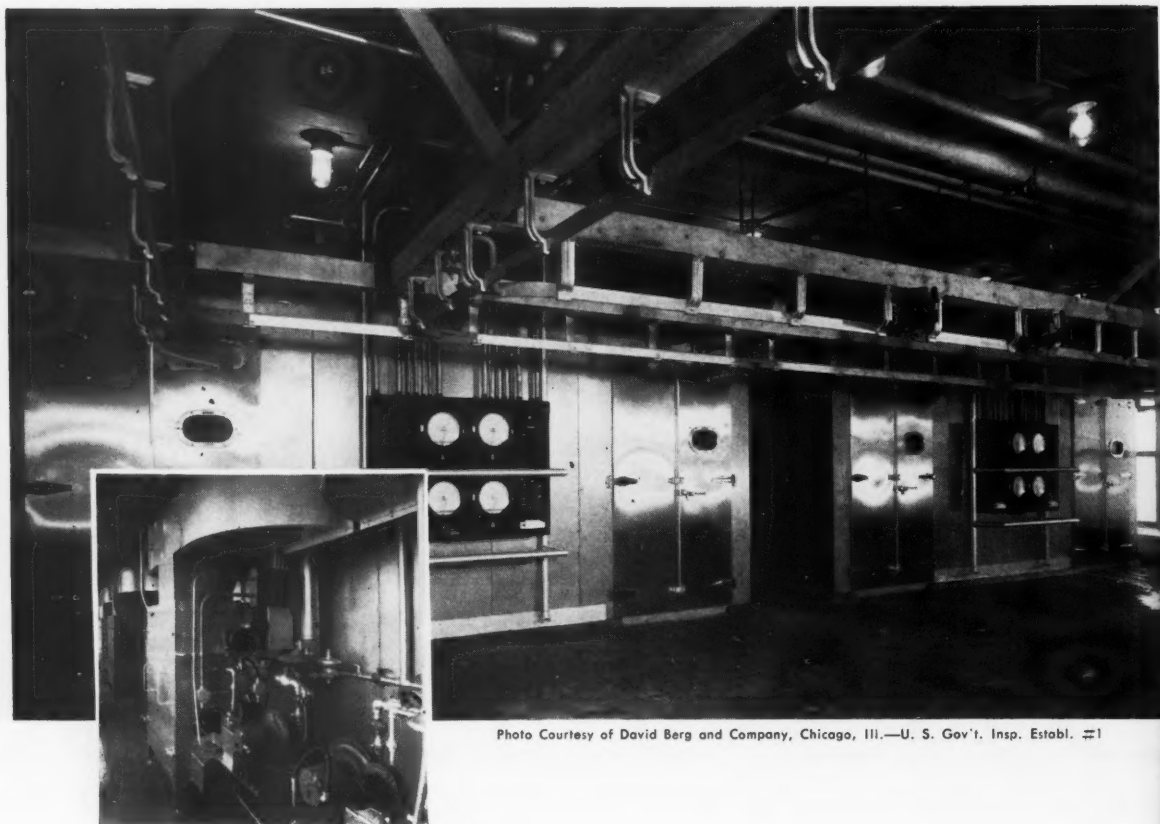


Photo Courtesy of David Berg and Company, Chicago, Ill.—U. S. Gov't. Insp. Establ. 41

SMOKEHOUSES BY *Alkar* ARE DESIGNED

AND ENGINEERED TO MEET YOUR INDIVIDUAL REQUIREMENTS

Alkar smokehouses are of "Clean Design"—No Bolts or Nuts Visible—with all panel inter-locking devices fully concealed, thus eliminating a major cleaning problem.

We guarantee Alkar smokehouses will process your product uniformly, with final internal product temperatures to be within 2°F. Alkar smokehouses are fast, with air temperatures rising a

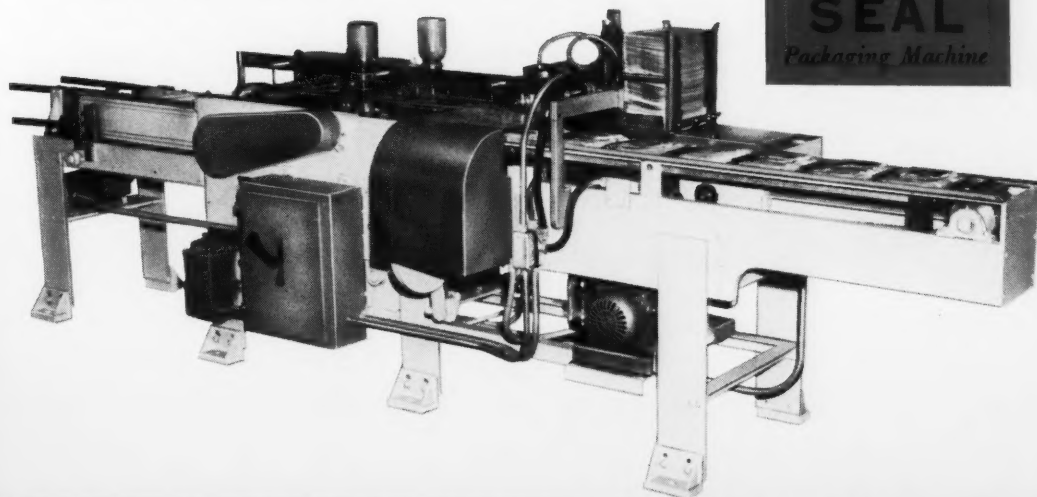
minimum of 5°F. per minute throughout the entire cooking range of 60°F. to 300°F. regardless of load, product or weather conditions. Alkar has been serving the meat industry since 1945.

Write or phone for further details on smokehouses, smoke generators, quick-chill cabinets, process cookers and sausage drying rooms.

ALKAR ENGINEERING CORPORATION

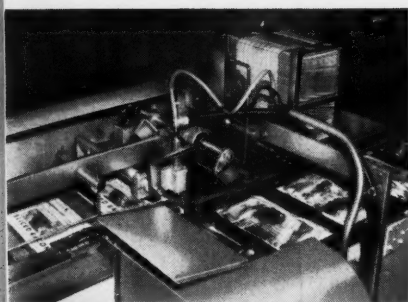
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West Chicago, Illinois • West Chicago 1810

PACKERS PACKAGE



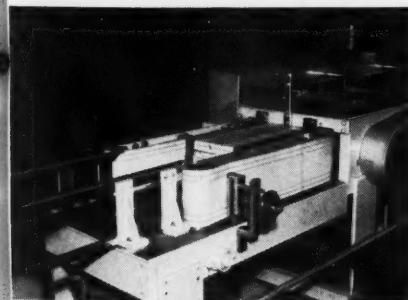
NEW AUTOMATIC BACON PACKAGING

E-Z SEAL BACON CARTONS ARE A NEW SPECIAL COATED STYLE -- ELIMINATING DEWAXING PROBLEMS



CARTON OPENER AND AUTOMATIC INSERTER

Bacon tray is placed on infeed conveyor by bacon arrangers and carried by intermittent motion to this station. Here, the carton which has automatically moved with bacon tray is opened, and bacon tray is automatically inserted into carton.



POSITIVE GLUING OPERATION

After positive glue application, due to new E-Z Seal process, cartons are carried into compression section which automatically moves completed package into shipping container.

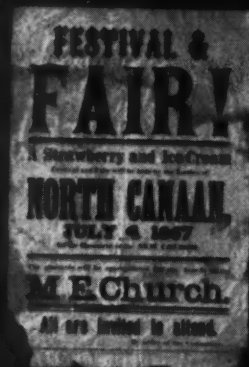
This style of bacon package may be automatically priced, code dated, and print establishment numbers to conform with State and Federal regulations.

NO NEED TO HANDLE PACKAGE AFTER TRAY INSERT IS PLACED ON MACHINE

PACKERS PACKAGE
INCORPORATED

108 EAST CENTENNIAL AVENUE
PHONE ATLAS 8-3643
MUNCIE, INDIANA

FOR THAT OLD-TIME COUNTRY FLAVOR...





... HELLER'S PORK SAUSAGE SEASONINGS

Appetizing, palate-pleasing . . . Heller seasonings have helped create an ever-increasing demand for old farm style pork sausage.

Since 1893, Heller's pork sausage seasonings have demonstrated their sales appeal to generation after generation. Heller's laboratory controls and know-how, plus the finest ingredients available, combine to assure you uniform top quality, always.

Fresh Pork Sausage Seasonings

Season your fresh pork sausages to mouth watering perfection. Heller's natural spice and semi-soluble formulas provide every desired variation.

Smoked Country Style Pork Sausage Seasonings

Choose from blends of tangy Heller formulas—for that delicious, farm-fresh flavor in all your smoked, country style pork sausages.

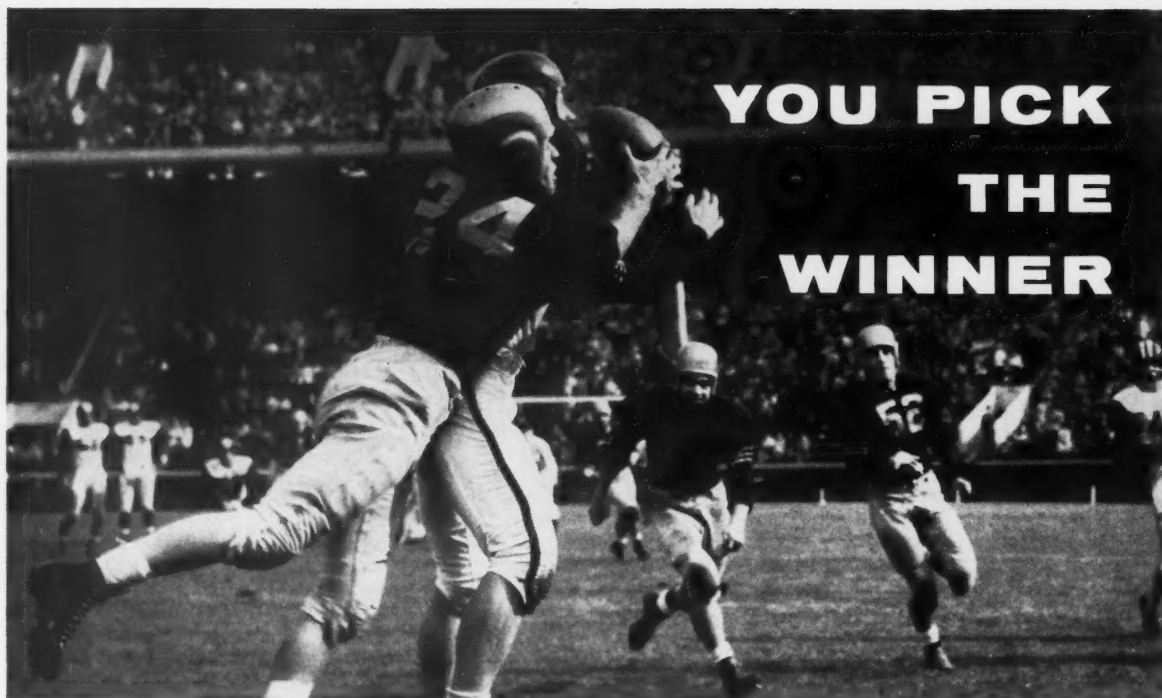
ASK FOR FREE USABLE SAMPLES OF THESE SUPERIOR SEASONINGS

If you have not received your free copy of Heller's new book, "SAUSAGE FORMULAS AND SEASONINGS," ask for it today.



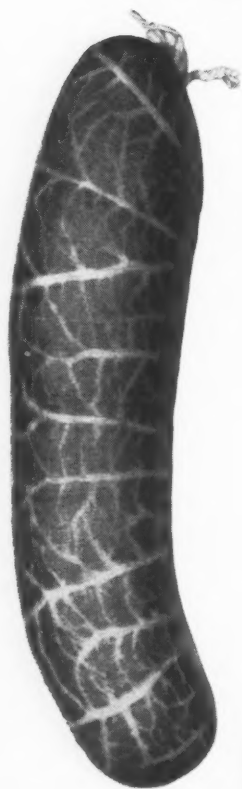
B. HELLER & COMPANY

CALUMET AVENUE AT 40TH STREET • CHICAGO 15, ILLINOIS



**YOU PICK
THE
WINNER**

...AND SCORE EXTRA POINTS
ON BOLOGNA PROFITS WITH



CUDAHY TWICE TESTED **CASINGS**

You score two ways with Cudahy's beef bungs casings 'round your bologna. Cudahy tests these fine natural casings for *strength*, so you score a savings on production with fewer casing breakages, work stoppages and rejects. Then each Cudahy Casing is tested for uniformity, so you score on customer appeal. Plump, colorful, attractive sausages spell quality and bigger sales at the meat counter for you.



Cudahy searches the world to bring you the finest selection of natural casings... 79 different kinds of beef, pork and sheep casings from the four corners of the globe.

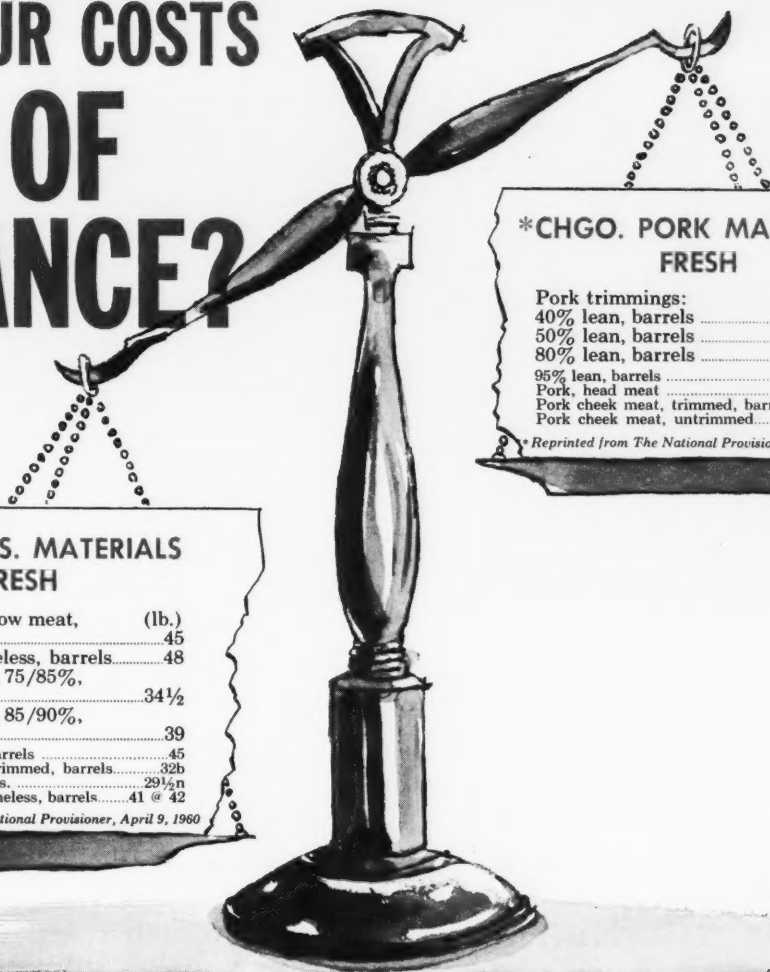
THE CUDAHY PACKING COMPANY

OMAHA, NEBRASKA



Ask your Cudahy Casing man how new KEYNETS can give your fresh, smoked and dry sausage new "eye appeal" and "old-fashioned" taste appeal. New KEYNETS practically eliminate breakage — thereby reducing casing costs.

ARE YOUR COSTS OUT OF BALANCE?



*BEEF SAUS. MATERIALS FRESH

Canner-cutter cow meat, (lb.)	
barrels	45
Bull meat, boneless, barrels	48
Beef trimmings, 75/85%,	
barrels	34½
Beef trimmings, 85/90%,	
barrels	39
Boneless chucks, barrels	45
Beef cheek meat, trimmed, barrels	32b
Beef head meat, bbls.	29½n
Veal trimmings, boneless, barrels	41 @ 42

* Reprinted from The National Provisioner, April 9, 1960

*CHGO. PORK MATERIALS FRESH

Pork trimmings:	(Job lots)
40% lean, barrels	16
50% lean, barrels	17½
80% lean, barrels	34
95% lean, barrels	38
Pork, head meat	28
Pork cheek meat, trimmed, barrels	35
Pork cheek meat, untrimmed	31

* Reprinted from The National Provisioner, April 9, 1960

New Super Tietolin

Reg. U. S. Pat. Office

REDUCES YOUR COSTS

without sacrificing quality!

TIETOLIN is the leading ALBUMINOUS BINDER backed by over 20 YEARS of successful use by quality meat packers throughout the world.



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Mixing Company, Inc.

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**GREATEST
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THE

1961 CHEVROLET STURDI-BILT TRUCKS! PROVED WORTH MORE BECAUSE THEY WORK MORE

A gigantic advance in trucking began just a year ago, when the first Torsion-Spring Chevy nosed out onto a highway. With a vastly different truck design, featuring torsion-bar independent suspension, this totally new Chevy did just about everything better. And it caught on fast. So fast, in fact, that already there are nearly 300,000 Torsion-Spring Chevis putting out this new kind of working ability on tough jobs all over America. Now, for 1961, Chevrolet introduces trucks with even more of the worth-more, work-more performance that's won such wide owner acclaim over the past year. Even more strength, even more stamina—and an even wider range of models!

MORE MODELS THAN EVER BEFORE! 189 models—work-proved dollar savers in every weight class! 1961 Chevis for every hauling chore in the book include three new long-wheelbase 4-wheel drive models, sturdy Stepside and Fleetside pickups, spacious panels, versatile Suburban Carryalls, handy Step-Vans and forward control chassis, tough chassis-cabs of all sizes, mountain-moving tandems. Somewhere in this long, *long* line is the one truck that makes the most sense on your job!

OWNER-PROVED TORSION-SPRING RIDE! It puts an end to I-beam axle shimmy! Independently suspended front wheels step right over bumps, tough torsion-bar springs soak up jolts. New smoothness speeds up schedules, cuts truck wear and maintenance expense, reduces cargo damage and driver fatigue. Owners report that there's never been anything like it for high-profit hauling!

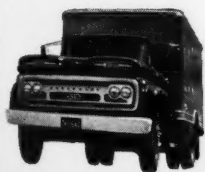
STRONG, ROOMY CABS THAT HELP BOOST YOUR WORK OUTPUT! Rangy drivers ride in comfort with extra hip room, leg room and head room. Seeing is safe and easy through a whopping big wraparound windshield. The seat's a beauty, too—a full 59½" wide with a spring combination inside that gives just the right support. (And for the last word in working comfort, special 6" foam rubber padding is optional at extra cost.) And the

rugged cab build includes all-steel construction, double-panel roof and double-walled cowl housing.

TOUGH TRUCK CHASSIS — BRAWNY BASIS FOR BIGGER PROFITS. Massive, truck-built frames add stamina to every chassis. In medium- and heavy-duty models, rugged self-adjusting variable-rate rear springs help smooth out big-tonnage hauls. Quality features galore boost truck life: Extra-big brakes give faster, surer stops and last longer. Precision wheel balance makes steering easier, lengthens tire life. Smooth, durable Synchro-Mesh transmissions come in sizes to suit all types of duty.

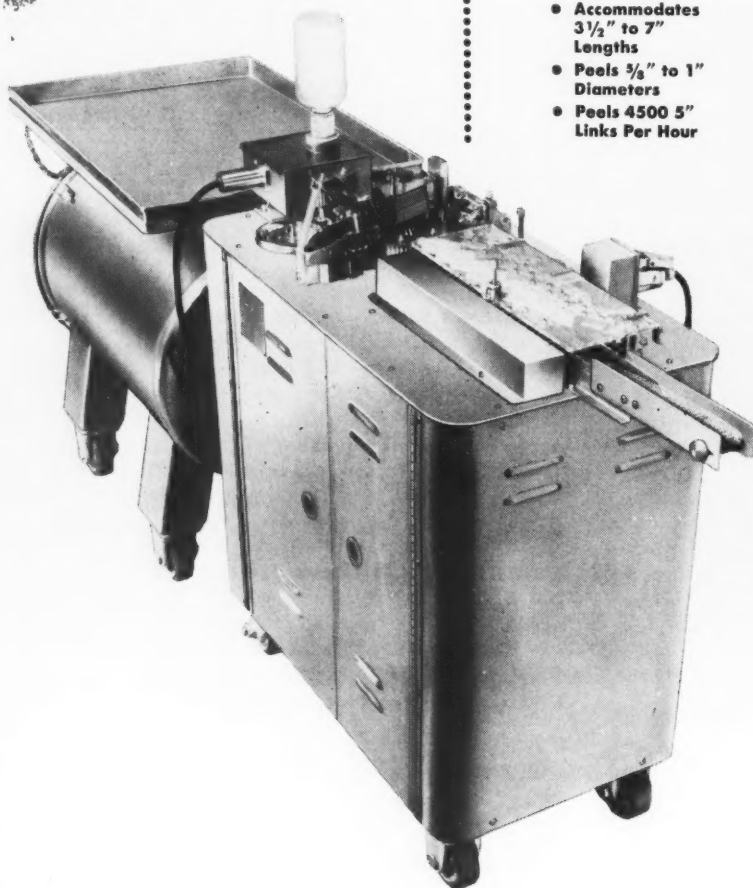
ENGINES WITH PROVED EARNING POWER. Famous sixes that out-sell all others because they're best at brightening cost records . . . big V8's that lead the industry for short-stroke design and hard-working durability! Chevy for '61 offers a *long* line of power plants to meet the special needs of every weight class.

The truth is, we could fill every page in this magazine with reasons why Chevrolet trucks have never been better than they are for '61, but there's no need for that. Not when your Chevrolet dealer can boil it all down for you so quickly and pleasantly. See him soon and start saving soon! . . . Chevrolet Division of General Motors, Detroit 2, Michigan.



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**Features continuous
and Dependable peeling of
skinless wieners**



- Requires only 2' x 6' of Floor Space
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- Peels 4500 5" Links Per Hour
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- Simple and Compact Construction
- Only One Operator for 2 Machines

**OVER 1800
MACHINES
IN DAILY
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Manufacturers of
TY LINKING MACHINE
TILT-TOP SERVICE TRUCK FOR TY LINKER
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WE'RE THROWN OUT OF THE FINEST HOMES!

But shed no tears. It's old hat to us by now and we simply don't get burned up about it. Odd too, because we put everything we have into Daniels wraps (and hope you'll do the same).

Chances are, we'd shed a tear or two if our wraps remained long on the store shelves, but they don't. You'll be quite pleased with the way Daniels wraps give a cheering "buy now" appeal to your goods . . . with the way that sparkling wrap moves from store to home. Every wrap we print and deliver is right . . . no blurs, no smudges, nothing out of focus.

Give us a call. We're always pleased to hear from you; we'd like to tell you more.

*This is the freshness
you capture in a Daniels wrap.*



DANIELS

MANUFACTURING COMPANY
RHINELANDER, WISCONSIN

Sales offices: Rhineland, Wisconsin . . . Chicago, Illinois . . .
Rochelle Park, New Jersey . . . Columbus, Ohio . . . St. Louis,
Missouri . . . Dallas, Texas . . . Denver, Colorado . . . Los Angeles,
California



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... Yes! We tailor-make COTTON BAGS to make your sausage sell faster. Our Art Department will design a COTTON SAUSAGE BAG with Eye-Appeal and Sell-Appeal. Then, give you the fastest service available!

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PROVISIONER "APPROVED" BOOKS

The books listed below are selected from a number of sources. In the opinion of the editors of The National Provisioner they are factual, practical and worthwhile—and are approved and recommended accordingly.

MEAT SLAUGHTERING AND PROCESSING

Contains information helpful to small slaughterer or locker plant operator interested in killing and meat processing. Discusses: fundamentals; plant location and construction; beef slaughter and by-products; hog slaughter; inedible rendering, casing processing; lard rendering; track installations; curing; smoking and sausage manufacture.

Price\$7.50

FREEZING OF PRECOOKED AND PREPARED FOODS

This 560-page volume has 24 chapters and 124 illustrations. Included are processing instructions for food technologists, quality control people, packers, home economists and restaurateurs. Book is devoted exclusively to the production, freezing, packaging and marketing of baked goods, precooked and prepared foods.

Price\$10.00

FREEZING PRESERVATION OF FOODS

Covers all frozen foods comprehensively. Includes principles of refrigeration, storage, quick freezing, packaging materials and problems; specific comment on preparation and freezing of meats, poultry, fish, other items. Complete discussion through marketing, cooking, serving, transportation. 31 chapters, 282 pictures 1214 pages.

Price\$18.00

HIDES & SKINS

A comprehensive work on rawstock for leather, covering takeoff, curing, shipping and handling of hides and skins; these subjects are discussed by experts in packinghouse hide operations, chemists, tanners, brokers and others based on lectures sponsored by National Hide Association.

Price\$8.75

MEAT PACKING PLANT SUPERINTENDENCY

General summary of plant operations not covered in Institute books on specific subjects. Discusses plant locations, construction, maintenance, power plant, refrigeration, insurance, operation controls, personnel controls, incentive plans, time keeping, safety.

Price\$4.50

ACCOUNTING FOR A MEAT PACKING BUSINESS

Designed primarily for smaller firms which have not developed multiple departmental divisions. Discusses uses of accounting in management, cost figuring, accounting for sales.

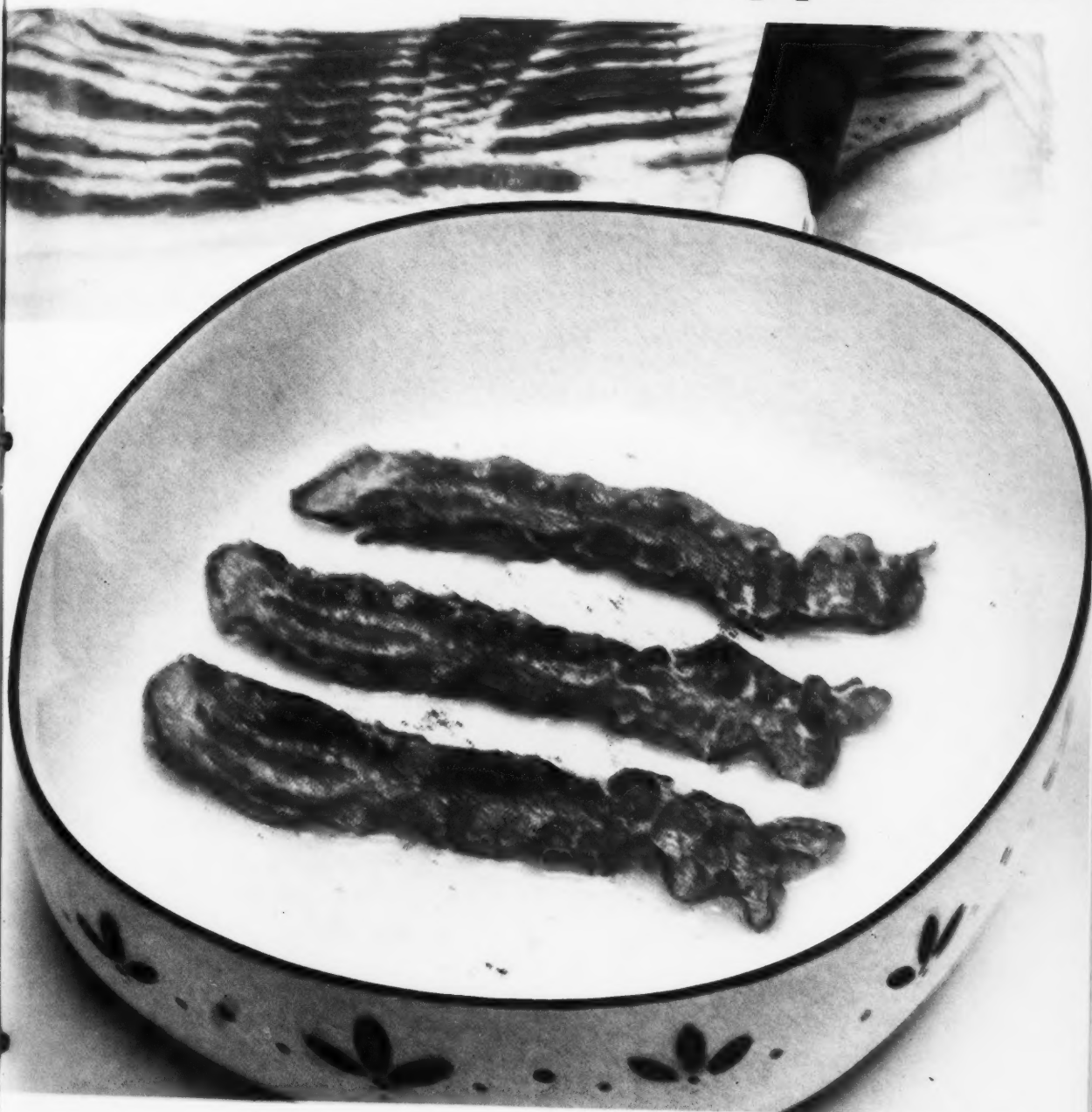
Price\$4.50

PORK OPERATIONS

A technical description of all pork operations from slaughtering through cutting, curing, smoking, and the processing of lard, casings and by-products. Institute of Meat Packing.

Price\$4.50

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UNIFORM SOLUTIONS—FOR-
MULA 11-2 CURAFOS, due to its
 high solubility, its stability over a
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in the bottom of the mixing tank,
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FORMULA 11-2 CURAFOS
 adds many desirable qualities to
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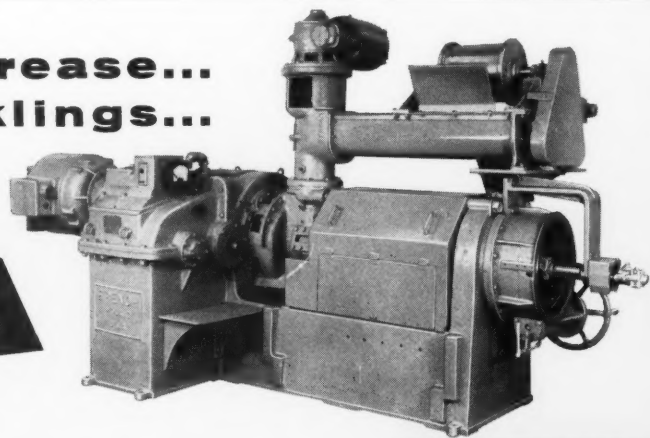
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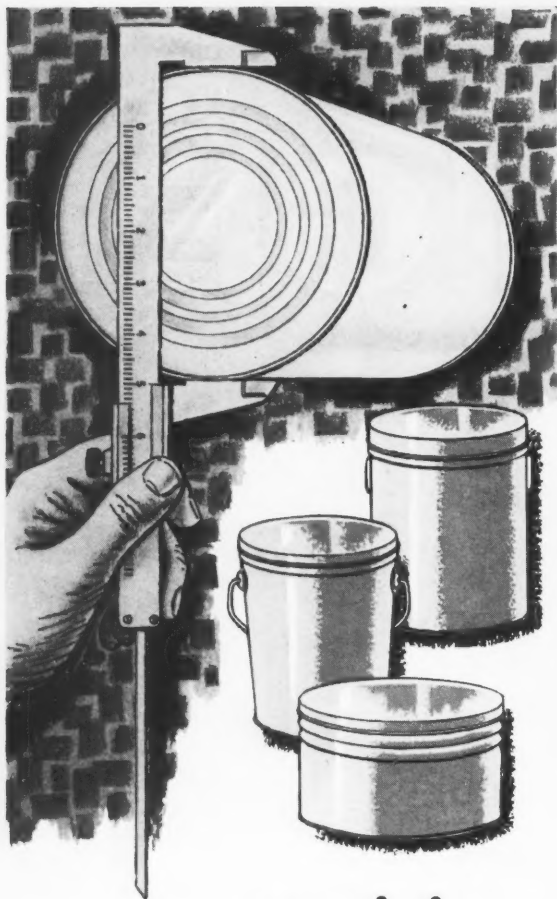
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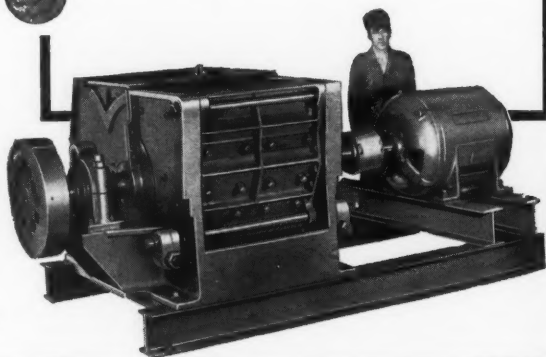
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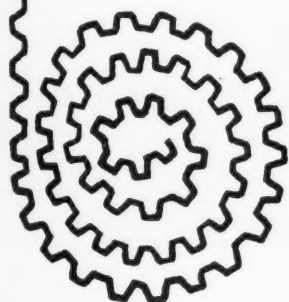
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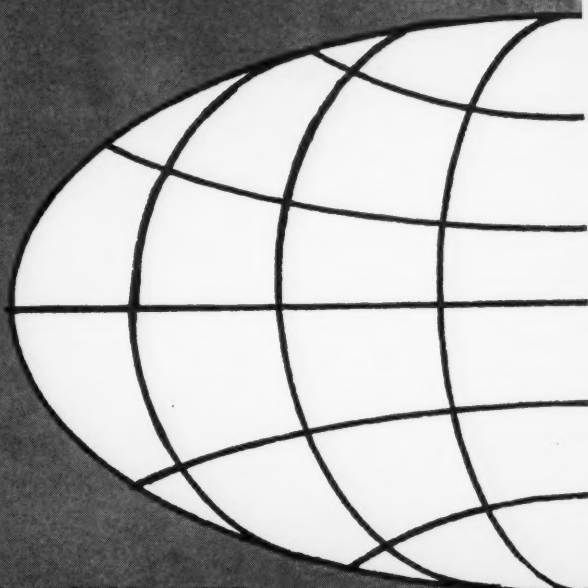
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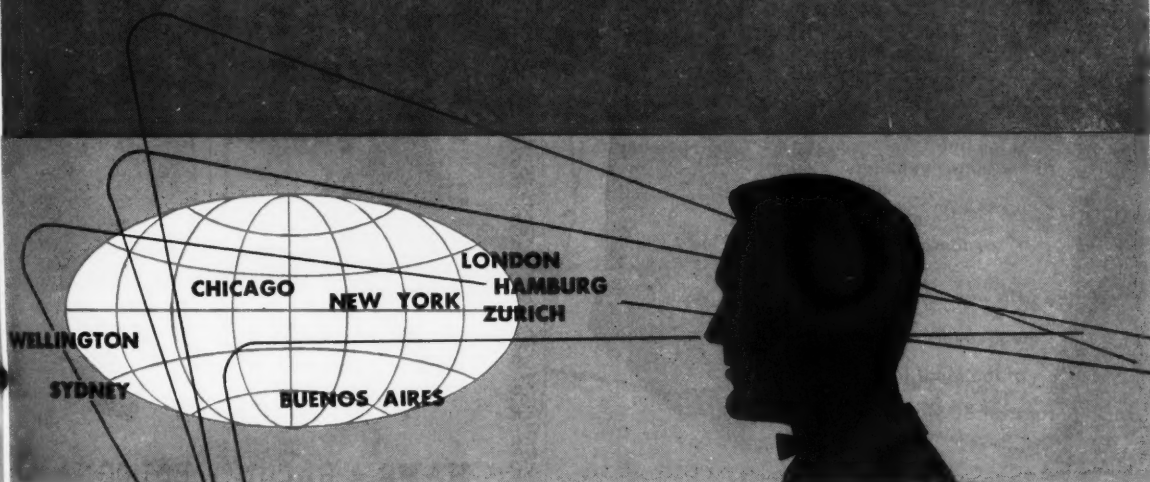


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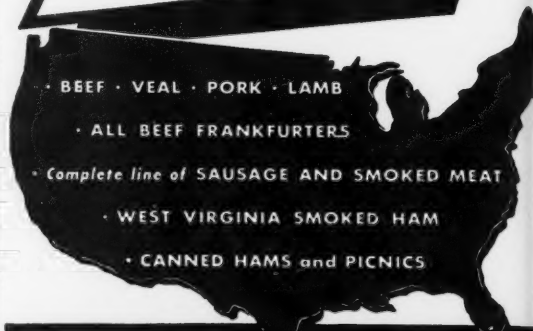
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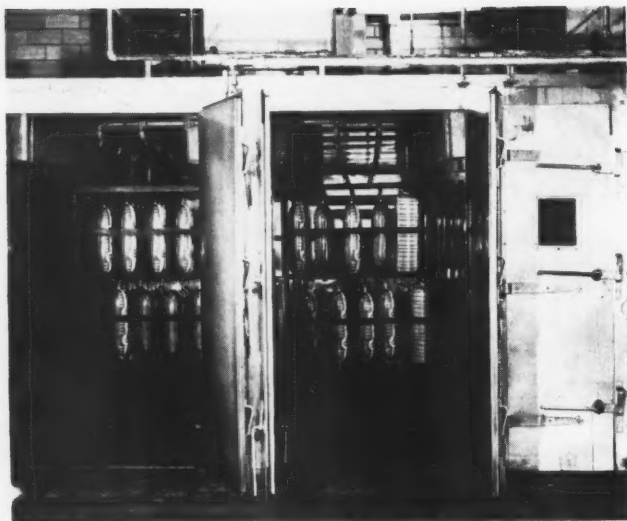
Many meat packers across the country are doing just that very thing. You can easily convince yourself by trying **WESTPHALIA CURE S-1097** in a week's production.



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THE NATIONAL PROVISIONER, OCTOBER 1, 1960



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Dear Mr. Packer:

We haven't seen you around for a while, and we miss you.

We have some nice, new, shiny SMOKEHOUSES on the shelf, built especially for you, that would look mighty good in your plant—and that's where they should be—earning money for you!

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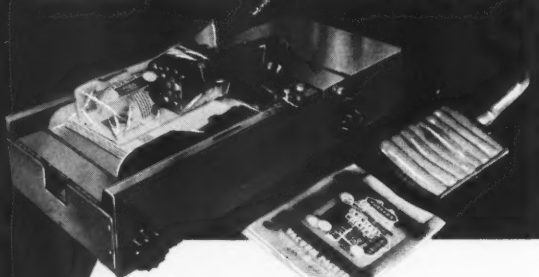
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Automatically OPEN bags for
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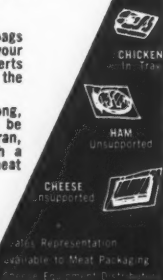
Simply place a batch of bags in position and bags open automatically ready to quickly receive your product. In one fast motion, the operator inserts product and delivers filled bag to a conveyor for the closing operation.

Machines are stainless steel, engineered to give long, trouble-free service. Every meat product that can be packaged in bags (poly-cel, poly-mylar, Cryovac, Saran, Polyethylene, cellophane,) can be done better with a Tele-Sonic. And there is a machine for every type meat product.

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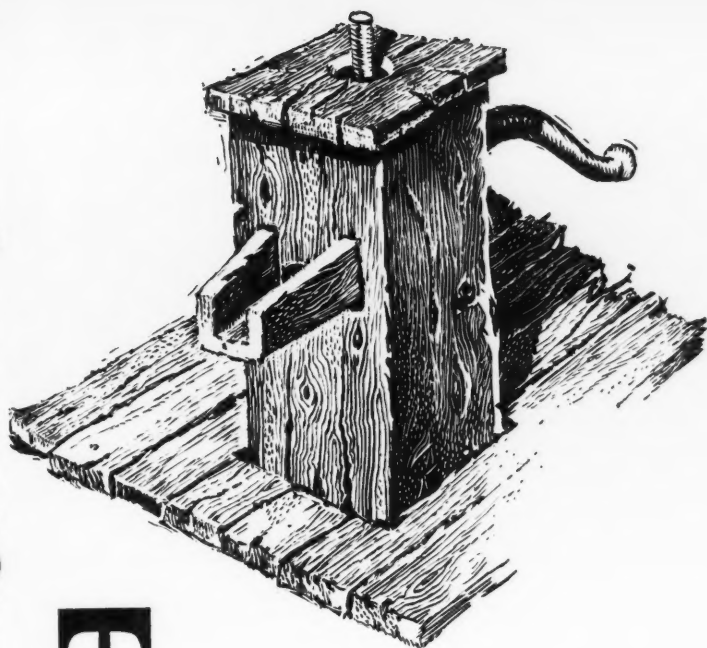
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THE PUMP AND THE RIVER OF MEAT

THE pump you see above isn't very dramatic. It never was—yet it was an accurate way to measure the progress of America through its early years.

Today, pumps are still measuring progress. Industrial progress.

More important, pumps themselves have progressed and are now doing jobs that were considered impossible a few years ago. No longer are they limited to light, free-flowing liquids. Many types are available to handle heavy, sticky liquids . . . emulsions . . . slurries . . . pastes . . . and even "near-solids."

The new line of St. John Tranz-porters is designed to pump all of those things, and more. Used according to our recommendations they can actually take the place of many other pieces of equipment in your plant. They will increase your production efficiency manyfold. Your product flows in a never-interrupted stream, without "bottlenecks." And, your costs are decreased sharply.

For example, a St. John Tranz-porter can elimi-

nate your stuffer when used to feed a cartridge-pack machine. No longer is your chub machine limited to the batch production of your stuffer. Instead, meat flows from chopper to container to pump and packing machine.

Other applications? In the processing of dog food, product flows from grinder to mixer to packaging machine—moved in steady flow by a St. John Tranz-porter Pump. Perfectly suited, too, to corned beef hash, hot tamales and a wide range of sausage products.

Wherever the requirement calls for rapid meat transporting through sanitary, stainless steel equipment—a St. John Tranz-porter Pump is ready to move your "river of meat."

Let us give you complete details on these and many other meat transporting applications. Write, wire or phone Mr. Ralph George, St. John & Company, 5800 S. Damen Avenue, Chicago, Illinois, PRospect 8-4200.

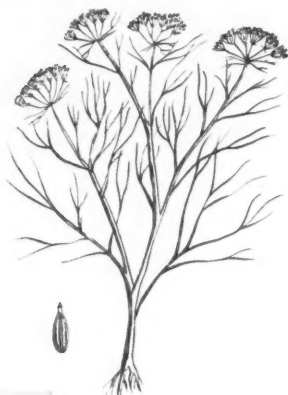


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CUMINUM CYMINUM L. *

Have you noticed the increasing size of spice racks in the supermarkets? . . . Or the quantity of spice shelves and peppermills in the five and dime stores? . . . Or the food ads that include spices? These are signs of our times . . . signs of America's new taste for the spice of life. They're important signs for a sausage maker because they say Americans are becoming more adventurous about food . . . looking for variety . . . appreciative of the finer points in flavor . . . *interested in the kind of high quality sausage products that are made with Natural Spices.*

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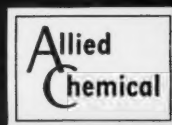
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ALL



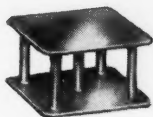
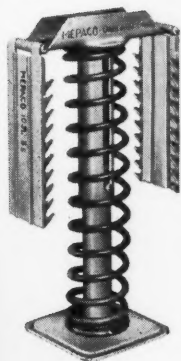
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is U.S.P.



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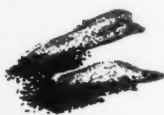
3 New Uses for the Mepaco

HAM MOLD and FORMER

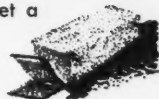


Mepaco Ham Mold and Mepaco Ham Former were designed to produce boiled ham $3\frac{7}{8}$ ", or 4", or $4\frac{1}{2}$ " square; and 24" to 27" long. Ingenious meat packers and processors are finding it profitable to use this same versatile equipment for other products.

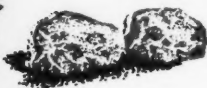
CORNED BEEF



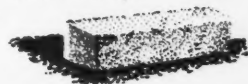
Cut bottom round lengthwise; put one piece in Mepaco Ham Former which will elongate the meat and shape it to fill the mold. You get a square Corned Beef loaf, perfect for slicing and ideal for portion control.



COOKED BEEF LOAF



Use any number of pieces of beef. The former will compress them into a square within the mold. You get a cooked beef loaf which is easy to slice and package; and, a portion of a loaf is attractive serve at the table.



TURKEY LOAF



Use one large or two small boned turkeys; and supplement with extra pieces to fill the mold. You get a square turkey loaf, perfect for slicing and packaging.

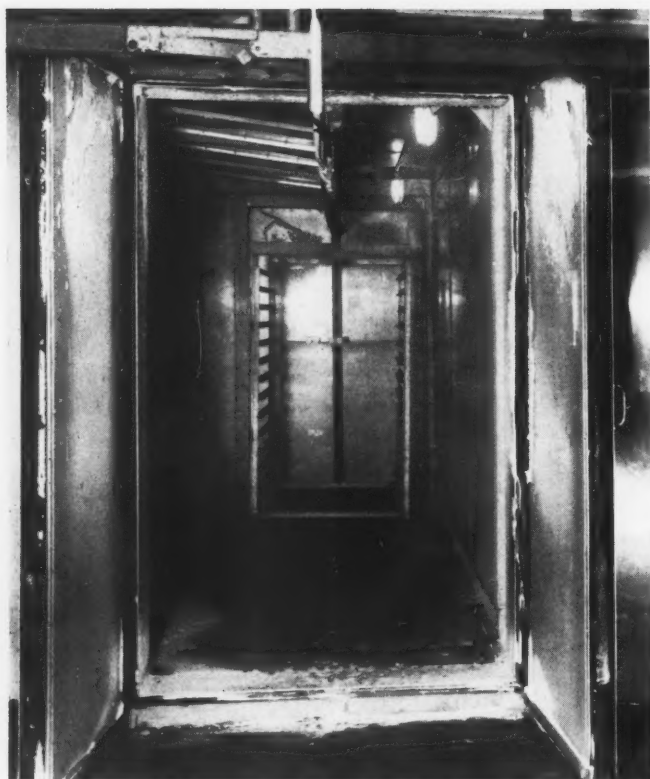


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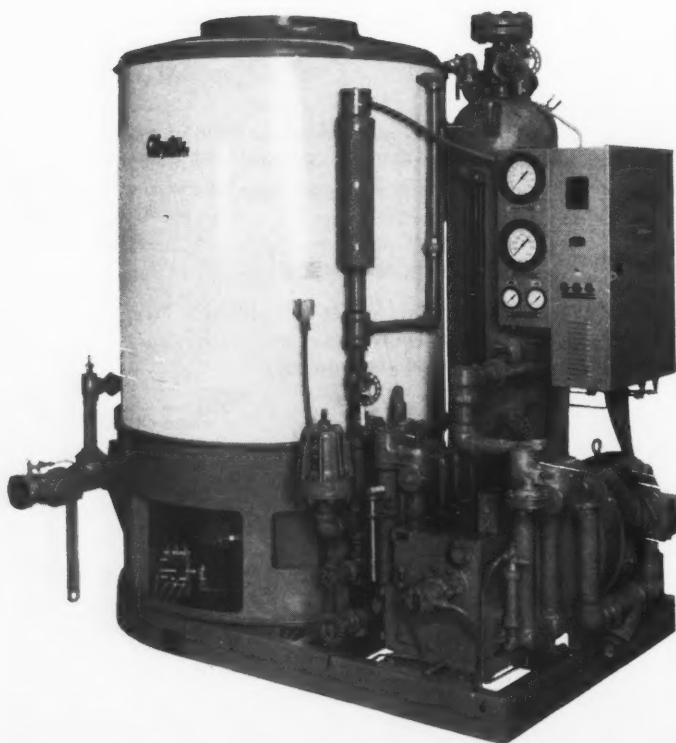


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CHILL CABINETS

Chilling with new Julian Prefabricated Chill Cabinet is now completely flexible because Julian has designed a compact unit which provides ideal chilling for sausage and all meat products. It can also double as a blast freezer for bacon or specialty products.

Julian's superior construction gives you a durable cabinet that costs less to buy, install and operate. Best of all, your operating efficiency goes up fast, since this cabinet takes the load off existing coolers and speeds up production.



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they combine to form an efficient production package for the packing industry. Let us give you all the facts about Julian chill cabinets, Clayton steam generators and the famous Julian smokehouses. Once you know the facts, you'll quickly see why the name Julian is another word for quality in the meat industry. Call or write us today.

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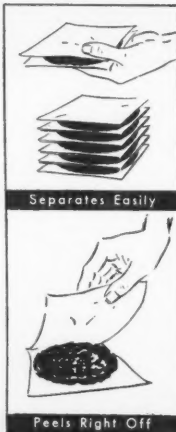
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Also NEW from Mid-West Wax—Impregnated Steak Paper for machines requiring 4" rolls with 1½" core... and Steak Paper in sheets of all sizes.



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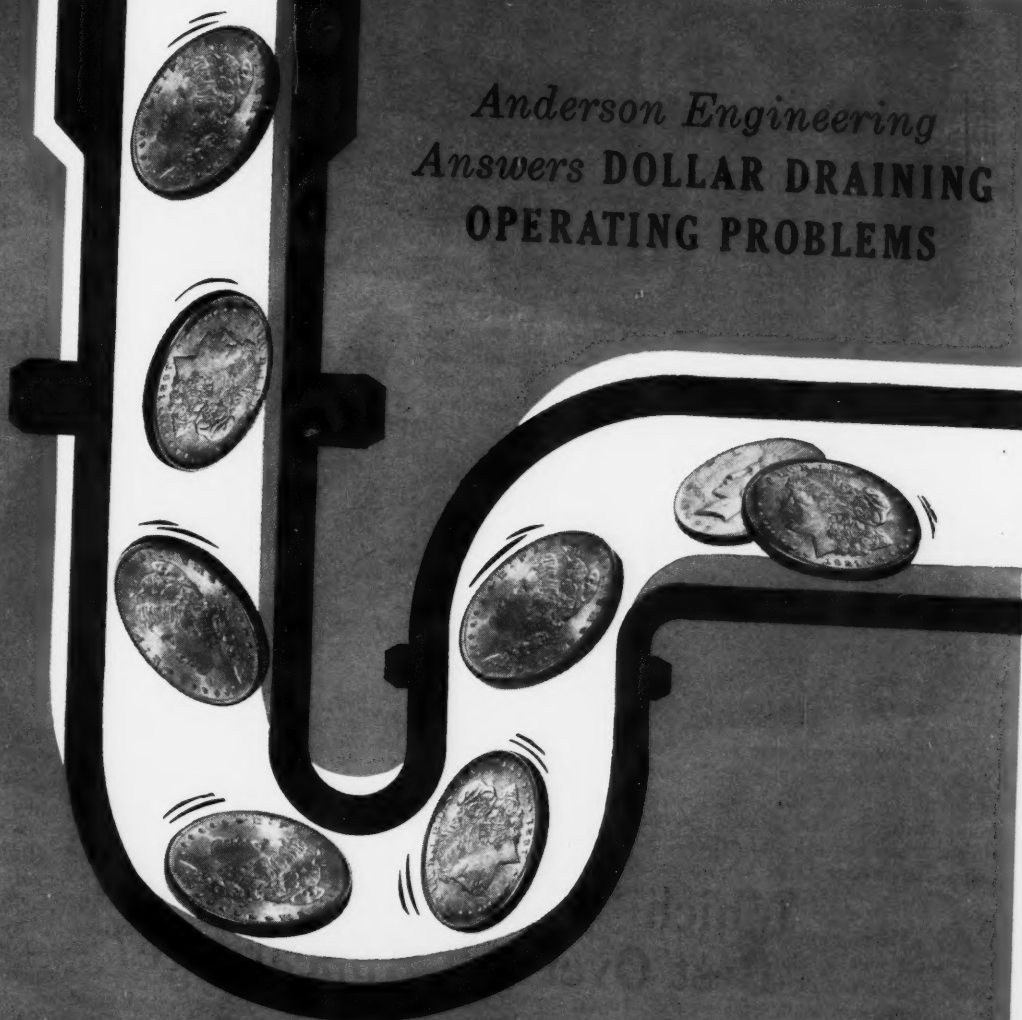
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Anderson Engineering Answers DOLLAR DRAINING OPERATING PROBLEMS



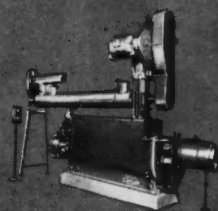
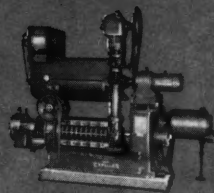
Advanced engineering design and metallurgy now being built into Expellers*, Expeller parts and related equipment minimize "dollar draining" labor and time losses. The result is lower operating costs with higher profits.

Many of these technological improvements are an integral part of today's Expeller and show up only in operating results. Others are readily visible. For example, Anderson's new improved "POWR-JUST" saves time and labor in operating the cake discharge mechanism by push button control. The new MAGNETIC PULLEY doubles protection against tramp iron, saving time, labor and parts damage in crackling operations. The new WORM PULLER auxiliary equipment saves money in quickly removing worms, sleeves and collars. In addition to these improvements, a wide store of processing and material handling ideas further increase efficiency and lower costs for Expeller owners. Ask your Anderson representative to bring you up to date on Expeller operating improvements that answer dollar draining problems. Write.

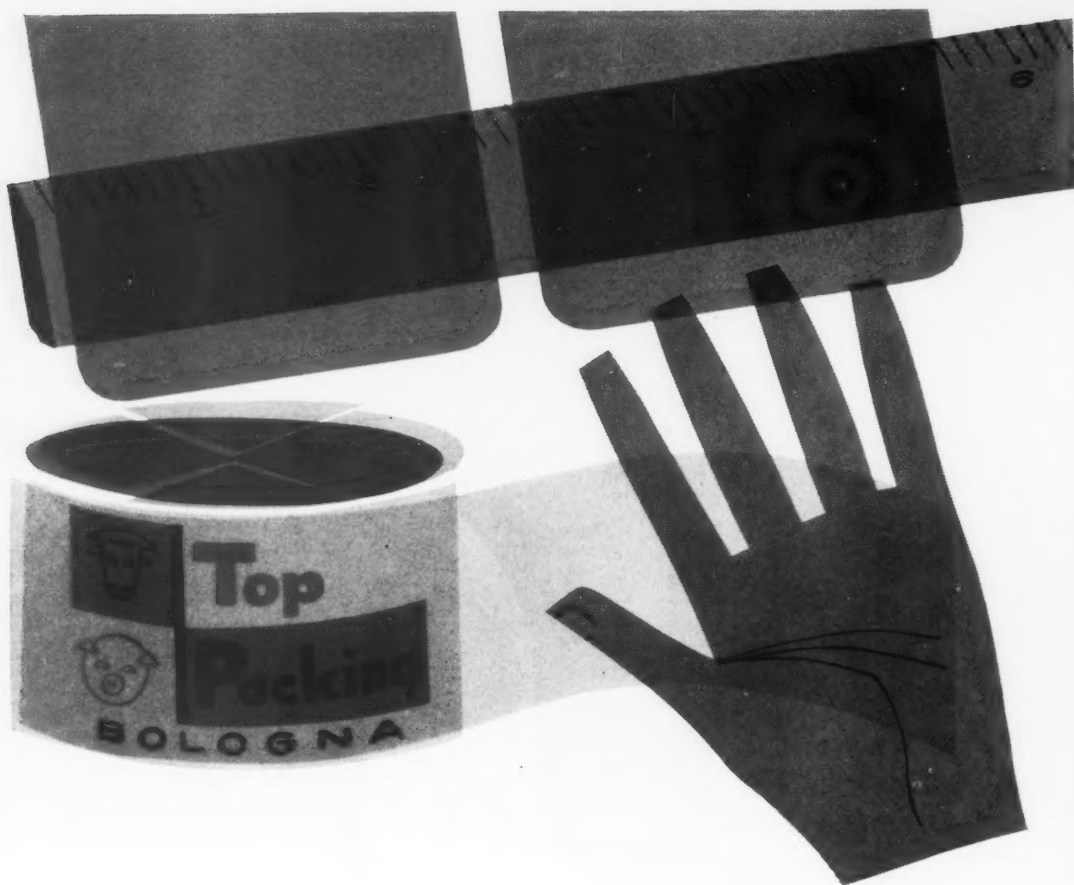


The V. D. Anderson Company

Division of International Basic Economy Corporation
1965 West 96th Street
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*T. M. Reg. in U. S. Pat. Off.



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THE NATIONAL PROVISIONER

October 1, 1960

VOLUME 143 NO. 14

Worth Some Time

It has been our job during the last 10 days to read (non-mechanically) and to persist in trying to understand what the speakers said at the 55th annual meeting of the American Meat Institute. If an editor does this conscientiously, holding the value to his readers paramount, his judgment may well be different from that of a person who participates in a meeting only as an auditor.

A speaker's emotional appeal, delivery and dramatic ability make little impression during the perusal of "copy," but the editor usually knows whether the speaker had something to say. Not infrequently we find that a speaker whose delivery may have stupefied his audience has actually made a clear and well-organized report with lots of "meat" in it. Oral discussion of a complex subject, with which the ear and brain may not be able to keep pace, is often clear when read thoughtfully. In other instances, talks which are audience "smashers" because of their emotional appeal and the speaker's histrionic skill, may read as hollow as a Khrushchev promise.

All this means is that we urge our readers to devote three or four hours to this issue of the PROVISIONER, which contains the most complete report available on the proceedings of the American Meat Institute convention. We are certain that it will be more rewarding than the "late movie" on TV or the most recent "paperback."

Without attempting to make any qualitative assay of the whole convention program, we recommend close study of the talk by Dr. Herrell DeGraff of Cornell University which begins on page 65. It constitutes one of the most discerning, realistic and valuable discussions of the meat industry—its problems, opportunities and limitations—that we have ever read.

Read, too, in the Loewy report (see page 130), the dinner talk by Don Grimes of the IGA, and elsewhere, how retailers and consumers look upon the meat industry and its products. Many of their views indicate that meat packers had better speed up the process of orienting their business toward consumption rather than production.

News and Views

The Federal Meat inspection regulation limiting added moisture in hams and other smoked meats has drawn the fire of leaders of two more industry associations. Following the Meat Inspection Division announcement that a task force will review the requirement that smoked product shall not exceed green weight, the regulation was hit by the board of directors of the American Meat Institute and the processors committee of the Western States Meat Packers Association, as well as the executive committee of the National Independent Meat Packers Association (see last week's NP). Announced Homer R. Davison, president of the American Meat Institute: "The board of directors, in support of the obvious reaction of members in and about the (annual) meeting, unanimously passed a resolution adopting the policy of opposition to any regulation which denies to the industry the right to process and sell all products in this category for which there is consumer demand. The Institute was directed to make a special effort to get the facts before the MID and to do everything possible to bring about the removal of inequities which this regulation has created."

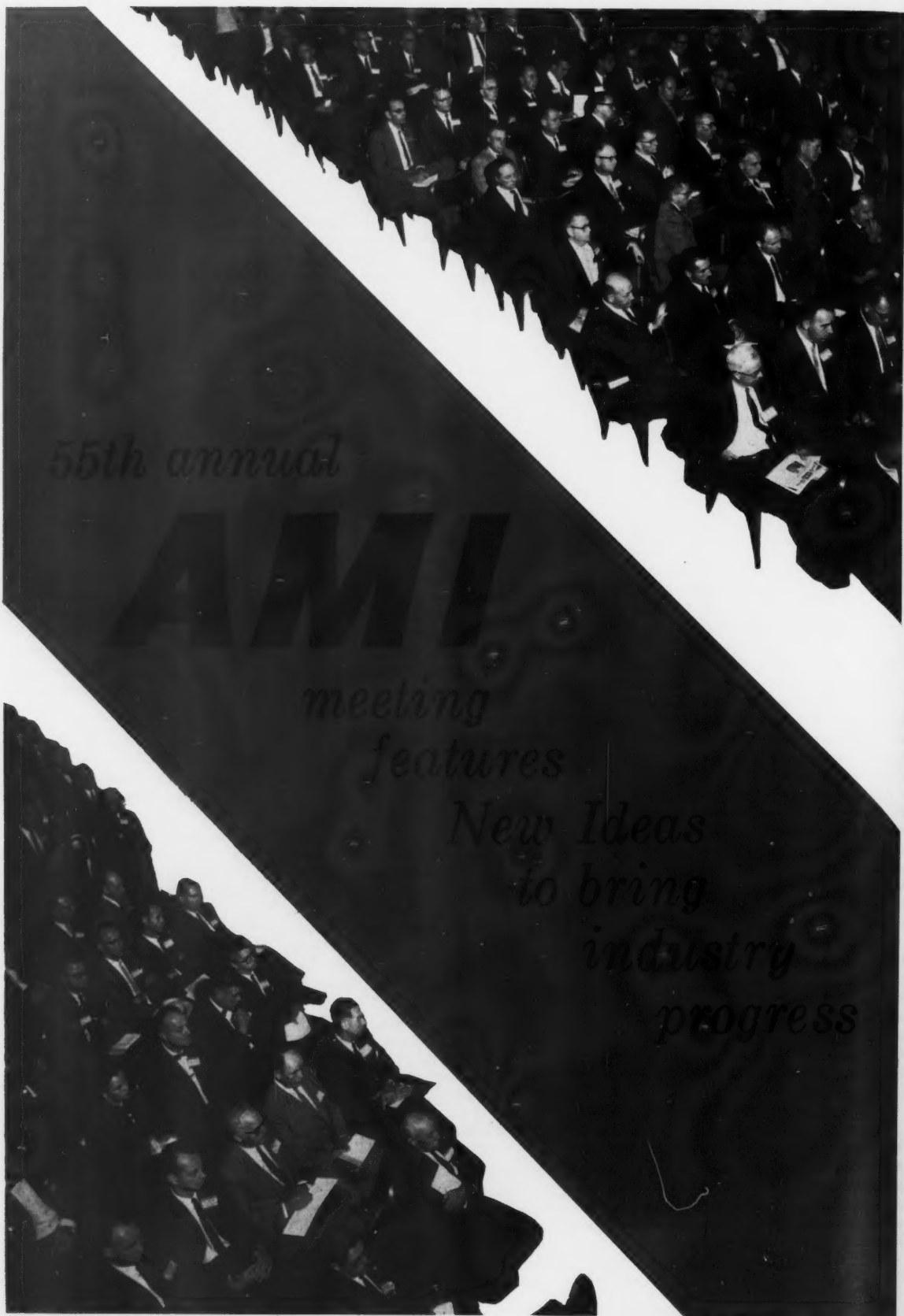
The WSMAPA processors committee discussed the MID announcement at a meeting in San Francisco. The committee "felt that again the MID was getting beyond its field of sanitation and health and into a wider field than the division is supposed to serve—in the same manner that the division last year proposed to limit the percentage of fat in sausage to 30 per cent," reported WSMAPA president E. Floyd Forbes.

After the NIMPA executive committee took a unanimous stand against any moisture limitation in smoked meats, the headquarters office began a poll of the board of directors to see whether the association should take an official policy position. At least 30 to 35 NIMPA officers and board members had expressed an opinion on the MID moisture regulation

[Continued on page 187]

Efforts To obtain state-paid meat inspection laws in 1961 will be emphasized next week at meetings of two state packer associations. The Kansas Independent Meat Packers Association will hear a report on a possible state meat grading service, in addition to state-paid inspection, at the group's fall meeting on Sunday, October 2, in Hutchinson. "An Organized Meat Industry for the '60s" will be the theme of the speakers' program on the second day of the October 7-8 annual meeting of the Michigan Meat Packers & Frozen Food Lockers Association, Inc., at the Poplars Motel, East Lansing. A business meeting and banquet are planned for the first day. Speakers and topics on Saturday morning, October 8, will be: Neil Webb, Michigan State University, "Trends in Meat and Food Science;" L. B. Mann, U. S. Department of Agriculture, "Frozen Food Lockers and the Meat Industry;" Don H. Stark, M.S.U., "Livestock Procurement for Michigan Meat Packers and Summary of Packer Attitude for State Meat Inspection," and Earl Brown, M.S.U., "A New Approach to Selling." Chairman of the program will be George A. Dike, Michigan State University agricultural economist.

Anti-Short-Weight laws of New York state and New York City are not violated by an agreement that weight of goods when packed will govern all sales, with no allowance for natural shrinkage, the Appellate Division of the New York Supreme Court has ruled again, in effect. The Appellate Division for the second time denied a petition of plaintiff Emerald Packing Corp. to appeal a decision of the Appellate Term upholding the right of Hygrade Food Products Corp. to enter into such an agreement covering a shipment of beef from Omaha to New York. There can be no further appeal so the Appellate Term decision in favor of Hygrade now is final.



55th annual

AMI

*meeting
features*

*New Ideas
to bring
industry
progress*

THEY came, 7,000 strong, to get new ideas—and they got them.

Some of the ideas encountered by the host of meat packers and processors who thronged the Palmer House in Chicago for the 55th annual meeting of the American Meat Institute were provocative but unpalatable—particularly those in the field of merchandising—others were encouraging, while still others were tantalizing in their promise of opportunity if . . .

Registration at this year's AMI convention, held September 16 through 20, was at a near-record level and most of the sessions drew overflow audiences. According to suppliers, traffic through the exhibit halls was heavy with packers showing keen interest in new equipment displayed there (see page 158).

ELECTION OF OFFICERS: Two new vice chairmen of the board of directors and three new board members were elected to help steer AMI activities in the 1960-61 year. The new vice chairmen are Robert H. Borchers, executive vice president of Armour and Company, Chicago, and T. E. Schludenberg, president of The Wm. Schludenberg-T. J. Kurlde Co., Baltimore. Borchers also was named to the executive committee. Directors newly-elected to three-year terms are: John Krauss, president of John Krauss, Inc., Jamaica, N. Y.; J. R. Bradley, president of Agar Packing Co., Chicago, and R. Dewey Stearns, president of Peet Packing Co., Saginaw, Mich.

George W. Stark, president of Stark, Wetzel & Co., Inc., Indianapolis, was elected to his fourth term as chairman of the board, and Homer R. Davison was named to his fourth term as president. All other officers also were re-elected. They are: vice chairmen, W. A. Barnette, sr., Greenwood Packing Plant, Greenwood, S. C.; Wesley Hardenbergh, AMI; H. B. Huntington, Scioto Provision Co., Newark, O.; John F. Krey, II, Krey Packing Co., St. Louis; Cornelius C. Noble, Noble's Independent Meat Co., Madera, Cal., and Hugo Slotkin, Hygrade Food Products Corp., Detroit; vice presidents, George M. Lewis and Aled P. Davis, both of the AMI staff; treasurer, H. Harold Meyer, The H. H. Meyer Packing Co., Cincinnati, and secretary and assistant treasurer, Roy Stone of the AMI.

The following directors whose terms expired in 1960 also were re-elected for three years: Alan J. Braun, The Braun Brothers Packing Co., Troy, O.; H. H. Corey, Geo. A. Hormel & Co., Austin, Minn.; C. E. Field, Field Packing Co., Owensboro, Ky.; Earl M. Gibbs, Earl C. Gibbs, Inc., Cleveland; H. B. Huntington, Scioto Provision Co., Newark, O.; Porter M. Jarvis, Swift & Company, Chicago; E. C. Jones, Jones Dairy Farm, Fort Atkinson, Wis.; William Kling, Valley Pride Packing Co., Inc., Huntsville, Ala.; Herbert J. Madden, East Tennessee Packing Co., Knoxville; W. S. Marks, Marks Meat Co., Woodland, Cal.; J. L. Roberts, Sunnyland Packing Co., Thomasville, Ga.; Milton J. Schloss, The E. Kahn's Sons Co., Cincinnati; Carl Weisel, jr., Weisel & Co., Milwaukee; T. E. Schludenberg, Schludenberg-Kurlde, and Hugo Slotkin, Hygrade.

After *Life* magazine presented an inspiring picture of the market of the 1960s, with its exploding urban and suburban population of better-income consumers (see page 62), Dr. Herrell DeGraff of Cornell University predicted that the decade would be one of rugged competition, during which unadaptable firms would succumb, and that profits would have to be earned rather than just yearned (see page 65). He emphasized that realistic budgeting of company operations would be one road to survival.

Some of the future tools which the industry will need



DESTINIES of the Institute will be guided during 1960-61 by Aled Davies, vice president; Homer Davison, president; George W. Stark, chairman of the board of directors; Roy Stone, secretary and assistant treasurer, and George Lewis, vice president, all renamed to the posts.

better to serve consumers and improve its own profit position were described by scientists and an economist. Dr. J. R. Stouffer of Cornell University demonstrated how ultrasonic equipment can be used to measure meatings in live animals (see page 74), while Dr. Richard L. Hiner, chief of the meat quality laboratory, USDA Agricultural Research Center, showed a new mechanical device for testing meat's tenderness and described chemical tests now under study (page 75).

On the basis of studies made by the University of Missouri, Dr. Elmer R. Kiehl, dean of the College of Agriculture there, predicted that growing discrimination against highly finished beef may force a new basis of evaluation upon the livestock and meat business (see page 77). Dr. Patrick J. Luby of Oscar Mayer & Co. told the group that research indicates that packers can do a better job of buying livestock in relation to value, but that while individual firms will benefit from keener purchasing, such a policy will not solve the industry's problems nor lift the industry's rate of earnings (see page 80).

Taking a look at the nearby supply situation, J. Russell Ives, director of the Institute department of marketing, said that the amount of fed and processing beef will rise in 1961; that the pork picture may duplicate that of 1960, and that veal and lamb production may be a little larger (see page 85).

Use of tabulating machinery in sausage formulation and in the planning of similar operations has aroused much interest in the meat industry. James C. Snyder of Purdue University told the group that machinery has shown it can get better answers more rapidly than does estimating, but that machinery must be fed facts and must be used with skill (see page 88).

New ideas are coming thick and fast in the sausage manufacturing side of the business, but each organization should evaluate them carefully before adopting them whole or piecemeal, according to F. Warren Tauber of the Visking Co. He advised packers to establish what an existing system is doing, assess what a new idea will do in terms of increased production or cost saving, establish the effect of the new system on quality and then decide whether to adopt it (page 92).

Changes in the sausage business are occurring in connection with raw material, by improvement in conventional processes (comminution, curing, stuffing, smoking, chilling and packaging), and full process automation has emerged in the form of Swift & Com-

pany's system for the continuous manufacture of frankfurts, according to Dr. W. M. Urbain, engineering research chief for Swift (see page 94).

The businessman who stands aside from politics and who does not urge participation by his friends and employees, fails in his duty to his community and country, conventioners were told by Arthur H. Motley, president of the Chamber of Commerce of the United States (page 98). Motley described a simple study course on "how to become an effective citizen of your community" which many businessmen and others are employing successfully in political activity.

The cranberry scare of 1959 did not catch the AMI napping; it had already been working for several years with producers, scientists and government agencies on problems arising out of the use of additives in food and pesticide residues on food. With the question out in the open at last, packers were given a good look at the situation at a seminar presented on Saturday afternoon, September 17.

Dr. William J. Darby, chairman of the food protection committee of the National Academy of the Sciences, emphasized that it would be impossible to eliminate from man's environment and food all factors which might conceivably be hazardous. He urged that scientific determination rather than rigid law should prevail in the regulation of the use of additives (page 103).

Dr. Clarence H. Pals, chief of the USDA Meat Inspection Division, declared that the division is responsible for the purity and wholesomeness of meat and has for many years been dealing effectively with the problem of additives, packaging and materials which might be introduced into livestock through feed or by other means (page 124).

Aled Davies, vice president of the AMI, told the group that the Institute has worked with the government and has been in the forefront of those demanding effective protection for the consumer. He said that the additives problem can now be discussed without scare headlines and that a sane and realistic program is being followed (page 127).

Discussion of the Loewy report on meat merchandising ranged over two days of the annual meeting. Both William T. Snaith, president of The Raymond Loewy Corp., and Dr. Herbert E. Krugman, director of research for Loewy, emphasized that the shopper feels "insecure" in the meat department of a supermarket, that she (and the retailer) are doubtful of the quality of the packers' products and that "price" is the key to many of her shopping decisions. Snaith said a new dramatic "sell" should be developed for meat to replace the present cold "here-it-is" approach (page 130), while Krug-

man urged packers and retailers to work together in building consumer confidence in meat (page 133).

Discussion of the Loewy report brought forth some suggestions by Snaith: that meat's anonymity be dispelled by giving the cuts better names and informing housewives on their use; that meat's quality be affirmed by establishing and publicizing industry-wide standards; that an industry code of ethics be established, and that methods be developed for eliminating friction between packers and retailers (page 140).

A panel consisting of packers, retailers and wholesalers analyzed the Loewy report and gave first priority to the problem of establishing a better relationship between packers and retailers (see page 166).

AMI advertising consultant Vernon D. Beatty warned the group that the manufacturers of other foods are attributing the primary virtues of meat to their own products. He urged that meat be glorified by advertising its nutritional value and said that packers and retailers should cooperate in doing this as one way of reducing the importance of meat's price in the consumer's mind. (see page 154).

The time is ripe for the meat industry to do something about improving communications with retailers and consumers, according to F. J. Townley, vice president of Swift & Company (see page 156).

Don Grimes, president of the Independent Grocers Alliance, stayed close to the theme of the closing sessions of the convention in his talk at the annual dinner. He declared that packers and other segments of the food industry must reduce distribution costs during the 1960s, and that those who do not may find themselves short-circuited. He cited the experience of his own organization in achieving many economies in this area (see page 146).

At the annual dinner, the American Meat Institute's Animal Agriculture Award was presented to True D. Morse, Under Secretary of Agriculture, by Senator Everett Dirksen of Illinois. (see page 148).

H. H. Corey, chairman of the board of Geo. A. Hormel & Co.; John F. Krey, II, president of Krey Packing Co.; Oscar G. Mayer, chairman of the board of Oscar Mayer & Co., and H. Harold Meyer, president of The H. H. Meyer Packing Co., were given AMI awards for outstanding achievement in the area of community relations (see page 150).

Industry veterans of 50 or more years' service were Walter E. Fitzgibbon, retired senior meat consultant for the Kroger Co.

Industry veterans of 50 or more years service were honored at a breakfast on September 19 and were given the gold AMI pins (see page 73).



GRAND BALLROOM at the Palmer House was filled with notables from all branches of the livestock and meat industry at the annual banquet on September 19. The group heard Don Grimes of the IGA describe how retailers are cutting distribution costs and expect packers to do the same. The photo shows a section of the speaker's table.

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Exploding, Upgraded Urban and Suburban Market of the 1960s Will Have to be Earned—and Not Just Yearned

Herbert Breseman of Life Magazine forecasts nature of the markets, population trends, production, incomes and tastes.

I'M SURE that all of you would like to have seen this decade get off to a somewhat better start, but though the start may be late, the factors that make for growth, progress and optimism in this decade are still present, ready to be realized. Thus, despite this temporary adjustment period in our business economy, the opportunities that make up the sixties remain as exciting as ever. However, they need to be recognized now, and plans made now, if one is to capitalize on these opportunities. The editors of *Fortune* magazine, in their analysis of "The Market of the Sixties," put it this way: "The future has to be earned, not just predicted."

The vastly expanded and varied economy that we can expect during this 10-year period we have just entered has special relevance to an industry such as yours. For a higher standard of living means not just the ability and desire to buy more things, but also the ability and desire for better things and a more gracious way of life. For example, it also means a higher nutritional level. I believe you will agree, in light of what our future holds in store, that your industry's potential for growth, as well as that of this country, has never been greater.

Our subject is the future, not the distant future but the years just ahead from now till 1970. It's already with us in many ways—in jet flights, making the world smaller; in medical advances, making life longer; in atom-powered subs, under Arctic ice, exploring a new Northwest Passage; in astronauts in training and rockets in flight, thrusting man out toward the newest—and widest—frontier.

QUIETER SIGNS: These are some of the front-page prospects of the future, but there are other, quieter signs of change in everyday American life, signs that map out the marketing landscape of the years ahead, the potentials and opportunities that are the basis for production plans and sales strategies. They are the signs that chart the "Market of the Sixties." One thing is certain; there will be more of almost everything—people, for example. There'll be 20 per cent more Americans, a total population of nearly 210,000,000, by 1970, and the number of family units will be up from 55,000,000 to 66,000,000.

There'll be more money, too. *Fortune* magazine predicts that the average family income in 1970 after taxes and in current dollars will be nearly \$7,500 a year, an increase in real spending power of about \$1,500 annually per family. The number of upper-income families—those earning more than \$7,500 a year—will double during the sixties, and these families will control three-fifths of all expendable dollars. Personal income, of course, is based on productivity, and the amount that we produce as individuals will rise even faster than our population. Output per person is expected to increase about 33 per cent for the decade, and the productivity of all the people—our gross national product of goods and services—should rise from some \$475,000,000,000 this year to a breath-taking \$750,000,000,000 in 1970.

We can expect dramatic new gains in science and technology, and we'll invest heavily in this area. During the fifties, our national investment in research and development was \$60,000,000,000, and in the decade ahead that figure will surely double.

POSSIBILITIES: It's impossible, of course, to predict the directions that research and development will take, but among the possibilities for the next 10 years (from sure things to long shots) are: Electronic refrigerators with no moving parts and dishes washed with sound waves (we'll probably need low-decible detergents). Foreign languages translated by machine may be part of improved communications, and there's a chance that from the sea we'll get fresh water at acceptable cost. Advancements in food preservation and packaging may put meat on sale in a much wider range of outlets; it's even conceivable that we'll find pork chops on sale at a drug store. With mechanization of the farm and better soil chemistry, productivity of livestock will rise rapidly. Whatever the developments in science, however, it's certain that industry will provide more new or vastly improved products than ever before.

More people, more personal income, more productivity, a wide choice of new products and services—these are some of the general characteristics of the "Market of the Sixties." Finding the meaning in the changes ahead requires a closer look at specifics. Let's begin with people.

U. S. population, increasing during the sixties by about 3,000,000 a year, will add the equivalent of a city the size of Syracuse, N. Y., every month. There are several reasons for this rapid population growth. Like



CONVENTIONERS pause to take a close look at the winning plans from the recent University of Nebraska architectural contest on beef plant design. Senior architectural students participated (most of plans displayed were published in the *Provisioner* of August 6, 1960).

almost everything else, babies were a bumper crop in 1959 after a slight decline the year before. The current boom will soon flatten out, but at a very high level, and we'll maintain this pediatric plateau until 1965. Then a new baby boom will start, and by 1970 the total births could exceed 5,000,000 a year. People will continue to marry at an early age, and big families seem to be back in style to stay. We can expect an average of two and one-half children in completed families by 1965, and almost three children per family by 1970. The rising birth rate will be accompanied by a lengthening span of life, in good part the result of medical advances and an awareness of better nutrition. This higher birth rate and longer life span insure a steady population growth.

POPULATION MIX: As in every period, however, certain age groups will increase at a greater rate than other groups to produce a changed population "mix." Bear in mind that while future birth rates are necessarily projections, changes in the population "mix" are facts, brought about by a population that has already been born. For example, there was an increase of 9,000,000 during the 1950s in the number of children under 10 years of age. All through the sixties these children will troop into adolescence, producing one of the noisiest booms of the decade and raising the teenage population by almost two-thirds. This increase means a big "plus" for the meat industry.

To a casual observer, the typical teenager seems to spend most of his time eating, phoning or completely dismantling a disreputable second-hand car, but he and his contemporaries spend a lot more than time. They're estimated to go through about \$10,000,000,000 a year, which is a lot of rock 'n' roll records, hamburgers, soft drinks and hot rods, but what the teenager spends on himself is strictly carfare compared with what his family spends on him. *Life* magazine's study of consumer expenditures showed that in 1956 families with teenagers represented 16 per cent of all families and accounted for 19 per cent of all U.S. spending, including 21 per cent of all dollars spent for automotive products and 22 per cent of the total for clothing.

As the teenage population expands, so will the food business, including meat. Teenagers need, on the average, 20 per cent more calories than adults, and they seldom stop at the subsistence level. The demand for "seconds" won't be limited to the dinner table, however. The second phone, TV set and car are apt to be family "musts" when this teenage deluge makes itself felt.

Due to the sharp rise in births after World War II, people entering their twenties will show an enormous increase, more than 8,000,000, in the 10 years ahead, but those entering their thirties (the sparse generation born in the 1930s) will decrease from today's level by about 2,000,000. The number of new 18-year-olds will increase rapidly, and by 1963 many of these will be ready to start keeping house. New households will be formed at the rate of about 1,000,000 a year, resulting in an increase of 20 per cent for the decade.

OTHER CHANGES: Household composition will be different, too. Back in the 1940s, most new homes were formed by couples starting homes of their own. Then, during the fifties, a large share of household gains came from "non-family" households: people living alone or with non-relatives. In the sixties, husband-and-wife households will again show a rapid increase. While today most household heads are in the "middle years," the largest gains ahead will be at the younger or older end of the age scale. The most encouraging marketing possibility here is an expanding demand for smaller homes and apartments and for the appliances and furnishings that go into them.

We'll have a lot more older people in the sixties. By 1970, approximately 9 per cent of the population—about 8,000,000 men and 11,000,000 women—will be 65 years old or older. Many elder citizens of the sixties will enjoy a financially secure old age, and while they won't have large incomes, every penny they have will be expendable. They'll be able to spend money, not only on cameras and fishing gear but also on furniture and appliances, for many retired people will be forming new although smaller homes. They'll be a sizable market, too, for foods prepared and packaged to meet their specific needs.

By 1970, people at work will number 80,000,000, a gain of 11,000,000 over today and a rate of gain more than double that of the fifties. The Department of Labor reports that half the increase will be accounted for by women, a trend that has been under way for some time. In fact, since 1950, women have represented four-fifths of the gain in the civilian work force, and during this



STEVE KOWALSKI, president, Kowalski Sausage Co., Hamtramck, Michigan, introduces his son Ron, a 1960 graduate of Xavier University, to his first industry convention.

period women at work have increased four times as fast as women keeping house.

Two marketing potentials are immediately apparent. There'll be a much larger demand for goods and services aimed at the career girl, and since half of all working women are married, there'll be a vast market of working wives, whose independent incomes will give them powerful influence in family purchases and whose dual responsibilities of breadwinner and homemaker will bring an even greater demand for ease in food preparation in the home.

WHITE-COLLAR WORK: Also upcoming are important changes in the kind of work people do. By 1970, for the first time in U. S. history, more than half of all workers will be freed from manual labor; 40 per cent of these will be in white-collar jobs. Of those in the white-collar occupations, two thirds will be managers, officials or proprietors, at the upper level of the white-collar class. In general, working for a living will be more pleasant than ever before. Not only will the worker be paid better for a more important job, he'll also work fewer hours. Today's 40-hour week will probably shrink to 38 hours by 1970, with more paid vacation time as well. More leisure and more income will make an unbeatable combination as a market for travel, for mass participation in sports and for all kinds of part-time interest products, ranging from pianos to power tools.

With the economy expected to grow more than 4 per cent a year, our gross national product will probably increase by about 58 per cent by 1970. This product must be split up among the competing demands in the econ-

omy: so much for defense, so much for investment in business and public works, and the rest for consumption, that is, for everything that all of us buy after taxes. Currently, we buy goods and services as consumers at the rate of \$290,000,000,000 a year. By 1970 we'll probably spend \$435,000,000,000, a nearly incredible gain of 50 per cent, or about \$1,300 per family unit.

Here are some specific increases in spending that *Fortune* sees as possible by 1970: Food, drink and tobacco, will be up in 1959 dollars by 29 per cent (and economists of the American Meat Institute predict that meat will keep pace, growing at least as fast as the economy, and probably faster as people upgrade their diets). Personal services and utilities will be up 86 per cent; automobiles, up 73 per cent; clothing, up 28 per cent, and household and recreation goods, up 51 per cent.

"SOCIAL INVESTMENT" FIRST: Defense expenditures will, of course, continue to represent a large share of the gross national product. There also are other investment needs ahead for when an entire economy increases as swiftly as ours will, temporary dislocations are inevitable, including overburdened schools, inadequate highways, water shortages, too few houses and strains on health, recreation and welfare services. As a result, early in the sixties there will be a disproportionate rise in "social investment," to relieve these conditions. Business, too, will take more dollars for investment and to accumulate inventories, and these dollars will cut consumer spending. In the second half of the decade, however, the amount we spend for actual goods and services will reverse the trend and show a tremendous increase.

To the man with something to sell, the astonishing rise in personal income is one of the most heartening aspects of the upcoming market. By 1970, it's estimated that (after taxes and in 1959 dollars) five out of six American families will be earning more than \$4,000 a year. This figure is significant because it's in the neighborhood of \$4,000 that so-called "discretionary spending" starts. This means simply that up to about \$4,000, a family can buy essentials and little if anything more, but when family income goes over \$4,000, choices begin to open up. No longer does all the money go for staples and bare necessities only; they can begin to spend with "discretion."

At first, of course, their choices are limited. Enter a \$5,000-a-year neighborhood, and chances are that all the families will be living pretty much alike. Move up the income scale to families earning \$7,500 or more, however; the 45 per cent of all families will control 60 per cent of all expendable dollars. Different spending patterns become discernible for these are the families who are able to choose, not just clothes and cars and entertainment, but an entire way of life.

SOCIAL CHANGES: How will Americans spend their money in the soaring "Market of the Sixties?" *Fortune* magazine sees a chance that our newly rich may create "a succession of brief, hectic booms in a wide range of markets, (from) boats to helicopters to original paintings to adult education to champagne-every-night to psychoanalysis." But perhaps they'll invest it in savings, stocks or bonds. Or, maybe they'll spend it for the conventional luxuries that have attracted high-income groups of the past—for cars (splendidly large or stylishly small), for an even higher-fi, for more expensive clothes, a larger house or for a bigger and better steak. However it's spent, it's certain that the new distribution of wealth will bring social changes, and with more money in more hands it will become harder than ever to assert differences in social status. Some critics feel that this will bring "sameness" in American life.

Fortune editors disagree and point out: "The man in the Ivy League suit may be a millionaire or a carpenter. So may the man at the wheel of a sports car, and the man on the beach at Miami. To the spectator, this may look like conformity; to the carpenter, it involves a new diversity." Even in physical location, Americans will establish different patterns in the sixties. Young people are still leaving the farm for the city. On the other hand, the suburbs, which have been growing in population seven times as fast as the rest of the country, will continue to expand. *Fortune* estimates that by 1970 two of three Americans will live in one of 200 major metropolitan areas, in either city or suburbs, and gains in the suburbs will be most significant in consumer sales.

One further dimension of the sixties that no marketer can afford to ignore is the rising national level of taste. It is well known that Americans are spending more time and money on "better things" than ever before. We have 15,000,000 amateur painters and sculptors; there are 30,000,000 amateur musicians and 42 major symphony orchestras in the United States. We buy twice as many books as we did only 10 years ago.

MORE EDUCATION: There are several reasons for this upgrading of taste, but the most important is formal education, and in this area we are making enormous strides. By 1970, nearly half the adult population will have graduated from high school, and college-educated Americans will have increased by one-third. Today, 16,500,000 have been to college; by 1970, the figure will be 22,000,000, of whom half will have graduated. While better-educated families usually earn more, they always spend more for consumer products. *Life* magazine's study of consumer expenditures showed that no matter what the income level, families headed by high school graduates spend 20 per cent more on the average than families headed by non-graduates.

One example of the exercise of good taste as a result of educated spending is the increased use of dry table wines, up 64 per cent in the past ten years. Another is our beautifully styled women's clothes, skillfully copied from top designers and mass-produced. The combination of higher income, education and taste will surely mean more meat on the table and higher-quality cuts served with taste and imagination. Also, better-educated families will appreciate the time and effort saved with the meat industry's convenience foods that reduce the time spent in the family kitchen.

The increasing diversity ahead will change even the structure of the market, for the "Market of the Sixties" will not be a single mass market; rather, it will be a number of markets, each large enough to be served by mass production and distribution methods. Besides more money to spend and more people to spend it, we must add the desire of the purchaser to select from a wide range of goods. The mass producer, seeking a larger share of market, may have to provide a wider variety of products to appeal to this desire for the unusual, but perhaps a smaller business, just by marketing a "different" product, may achieve sudden massive demand and the possibility of overnight success.

One fact is certain. In the sixties, as in every market, the greatest rewards will go to those who are most adventurous, best informed and most creative in their marketing plans, and who begin planning now because it is now when the future will be earned. These attainable gains we've talked about—in income, buying power, higher living standards—will be made possible not by the collective efforts of an industry or a company, but by individual productivity, and selling in the "Market of the Sixties" will be on the same terms. Success will depend on how well every individual does his job.

Remember Earning is the Objective in Applying the Formula $V \times M = E$

Dr. Herrell DeGraff of Cornell University sees the 1960s as most competitive era for the meat and other businesses.



YOU perform an indispensable function in the sequence of services between the producer of livestock and the consumer of food. Everyone involved in the aggregate of services that puts food on the table has a stake in the effectiveness with which you do your job—just as you have a stake in the effectiveness with which livestock is produced or with which food is distributed to the consumer. My personal interest in your industry and your problems is to contribute in any small way to a more successful and more effective overall food team, including farming and ranching, processing and food distribution.

Surely, I do not know the intimate details of your business. I am not close enough to see the trees. This gives me a certain poetic license. But if I cannot see the trees, I may be enough on the outside to see the forest, and thus to raise well-intentioned, and, I hope, useful questions about your business.

Year after year the packing industry turns in the lowest net earnings on sales (and generally on net assets as well) of any major industry in the American economy. As I have said previously in studies prepared for livestock producers, your overall year-to-year earnings are too low to be good either for you or for them. In the 13 postwar years, your industry earnings have averaged .8¢ per dollar of sales. In only three of the 13 years have you done as well as 1¢ on your sales dollar. This record raises the question of "how low is too low" for earnings? I know of only one answer. An industry's earnings are too low if they fail to provide the new capital necessary for research and for modernization to

remain fully efficient and fully abreast of the industry's potentials. Or, in the same vein, the earnings are too low if they fail to provide ready access to the capital markets for these same purposes. This is the situation, I have come to believe, with respect to at least part of the packing industry, and it is the reason I am interested specifically in your earnings problem.

The approach I shall use here, however, is not to the packing industry as such. Rather, it is to the challenge facing individual company managements. A coordinated industry program to improve earnings is neither logical nor legal. I join strongly with the philosophy that competition must be vigorously maintained, in spirit and in fact. Consequently, any move toward better earnings will center on the efforts of the individual company to improve its own competitive position.

It is my conviction that opportunities in this direction are considerable. I am equally convinced that attainment of such potentials, in a fully competitive framework, is much in the interest of producers of livestock and consumers of meat, as well as the individual company in this industry. The best interest of the packing industry is served, incidentally, when the individual company is competitively successful. The weak seller, as a case in point, tends to create problems for his competitors as well as for himself—problems that weaken the whole industry, while at the same time failing dismally to benefit either consumers or producers of livestock on any permanent basis.

OPERATING PROBLEMS: The packing industry is facing operating problems of considerably greater complexity than in the past. I have set down a list of five points to illustrate this statement—points that might be called hard economic realities having marked impact on your earnings, and to which you have little alternative than to adjust on a continuing basis. The five points are as follows:

1) The seasonal variability of livestock supplies. This variability always has caused complications in the packing industry, but its consequences are now much more serious than in the past. This is still true even though there has been in recent years a trend toward smoothing out the flow of slaughter livestock. Carrying standby facilities is now much more costly than historically was true. In addition, you now bear increased labor cost per unit of volume whenever you operate outside a narrow range of variation.

2) The difficulty of projecting either your tonnage or dollar sales. With supply that is variable but not accurately predictable, you are hard pressed to project your sales into future accounting periods, except on a short-time basis. Product prices, of course, vary inversely with supply, and for numerous products of this industry the market price variations are even greater than supply variations. Your difficulties in maintaining margins in the face of variable supply are considerable, to say the

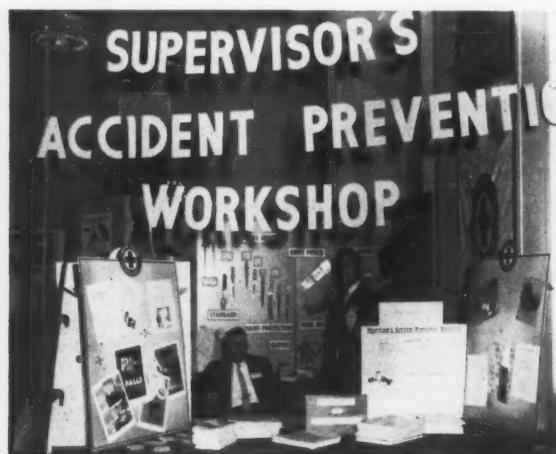


FAMILIAR scene at convention was crowded desk for filling out registration cards. Registering (left to right) are: Don Johnson, account executive for Buchen Advertising, Inc., Chicago; Bob Fast, advertising manager at Marathon, Menasha, Wis., division of American Can Co., and Sherry Hoss, Marathon product specialist.

least. Since your earnings are determined by volume times margin, you must move more firmly than in the past toward keeping both volume and margins working for you.

3) The impact of industry capacity. Packers long have prided themselves on having sufficient plant capacity to handle readily all seasonal and cyclical peaks of livestock marketings. Even with a growing national economy, the packing industry continues to have excess capacity because year by year more facilities have been added than have been abandoned. The overhead costs of extra capacity have stimulated a widespread industry practice of bidding aggressively for volume in order to contribute to carrying the overhead. That the economics of overhead, so interpreted, have become a burying ground for profits in many packing companies will be discussed later.

4) The decreasing flexibility of your costs. Plant overhead no longer is the only area of fixed costs in the industry. Your operating costs have become increasingly fixed. You have less flexibility in shifting your production workers from job to job. You have only a



BOOTH of National Safety Council was being manned here by John Thurman, safety director of Oscar Mayer & Co., Madison, and Marshall Petersen, senior safety engineer, National Safety Council. Booth featured personal protective equipment and plugged the supervisors accident prevention workshop. Members of the AMI safety committee staffed the Council's lobby exhibit.

narrow range of volume variation without penalty in labor cost. Against labor contracts which permit only 10 per cent variation, between 36 and 40 hours, the weekly variations in hog slaughter have ranged from 40 to 70 per cent in recent years (from the low to the high week in the year). When you have overtime operations, your increased labor cost per unit of product goes up faster than your fixed overhead goes down under the influence of greater volume. For each hour of overtime that you blend into 40 hours of base pay, your weighted cost of labor goes up about 1 per cent. This is more than can be offset in most plants by reducing fixed costs per unit. And, of course, where you cannot freely reassign workers and you drop below 36 hours of operation, you are threatened with standby labor cost.

5) The joint-cost nature of your products. What does a ham cost in any one of your individual plants? A ham is a joint product along with bellies, loins, picnics, lard and many other items. You can readily figure what a

hog costs and also the cost of handling it, but when any one product is a joint product, it has a joint-cost—and a joint-cost defies precise determination. If you do not know with precision what a joint-product costs you, how do you proceed to get your money out of it? This problem is real and continuing in the packing industry, and a workable answer to it is much more important than it has been in the past. Differing cost-accounting procedures among different companies will result in different costs for any joint-product (a ham, for example), even though both hog costs and overall operating costs might be the same in the different companies. One company ends up with a cheaper ham and a more costly loin, compared to a competitor that has a cheaper loin and a more costly ham, simply because the internal cost allocations were different. In the market there is a tendency for each of these companies to influence prices with its cheaper product, and each then has real difficulty in getting its money out of the item that its cost accounting procedures made the more costly. Increasing competition in today's product market, and probably greater use of cost accounting influencing offering prices by different competitors, is making this joint-cost problem an increasingly serious matter in the meat packing industry.

These five points are presented as some of the economic dimensions that have a marked impact on earnings in your individual companies. To whatever degree you have adjusted, or can adjust, to them and have brought them under control that is appropriate to your own circumstances, you are in a competitively strong position. To whatever degree you have not adjusted, you are behind the 8-ball.

MANAGEMENT DECISIONS: In trying to organize my own understanding of packing industry problems, another approach I have made has been an attempted classification of your areas of management decisions. These seem to me to fall into three groups, comparable to what I have experienced in farming. If a man buys a certain farm, his decision to make the purchase immediately fixes many of his subsequent decisions. If, secondly, he decides to put a dairy herd on the farm, he has fixed another large area of the decisions that follow. His current or day-to-day management decisions are obviously molded and limited by circumstances that became fixed when he selected the particular farm and when he decided on the type of farming he was going to do on it.

Similarly in the packing industry, we might classify (A) investment decisions; (B) policy decisions, and (C) operating decisions.

A. Investment decisions, at least for most companies, are the most important ever made. They are infrequent, often only once-in-a-lifetime decisions. They are the location, the bricks and mortar, the major-facility decisions. They are in many ways like a marriage. Once accomplished, the consequences—either good or bad—hang over you and determine much of what you will do for a long time to come.

For many packing companies, this level of decision was made as much as a generation ago. The decisions were made then in relation to distinctly different economic and competitive circumstances than prevail today. For example, when the market flow of raw material was seasonally different, when it mattered less if a plant stood idle part of the year, when seasonal storage was more common and more profitable, when labor costs were relatively much lower and when costs were much more flexible than is the case today. Such investments of the past are still shaping the pattern of many packing industry operations, and in some companies the adjust-

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ment from the heavy hand of past investment decisions is yet to be made.

B. Policy decisions are made much more often than the investment decisions but certainly not on a day-to-day basis. They include such matters as full-line or specialty operation, that is, the product line that will be produced, the geographic areas of distribution, the sales organization and distribution facilities that will be developed, whether production will be for the bulk market or branded product, and the type of livestock procurement organization that will be used.

None of these decisions is as confining as a major investment decision, but neither are they changed on a short-term basis once the pattern has been set. Some are more easily varied than others in response to a changing economic and competitive environment but, notably, all of them are greatly influenced by the fundamental decisions of location and fixed investment.

C. Operating decisions encompass an area of decision making comparable to what the farmer has left after he has bought the farm and put on his cattle herd. He can feed more grain, or less. He can raise more heifers, or fewer. He can displace labor with capital equipment. He can intensify to more volume or slack off to less. Perhaps the best way to describe this area of decision making is to classify it as your area of flexibility, including the things you can change any day you decide to do so without doing violence to the more fundamental decisions that have preceded.

Obviously the list of flexibilities has limitations, because at so many points it is frustrated by the heavy hand of prior investment and policy decisions. You can, however, change volume somewhat more freely than is dictated by market flow of livestock alone. You can decide to put more or less product in the freezer or take it out. You can concentrate on the maintenance of volume or the maintenance of margins or you can, I think more wisely, let both volume and margins be variable in order to concentrate on earnings. You can, finally, move somewhat more firmly than some companies have done to keep your operating departments flexible, even though your efforts to do so have been complicated by other trends, for example, by labor policies that have somewhat tied your hands.

SWEEPING CHANGES: Everyone recognizes that we are living in a time of sweeping changes. There is not a business in the country that is unaffected. Many of the changes are so great as to dictate other changes, in turn, in business organization and operation. Moreover, many of the changes that have been occurring around us are irreversible, and there is no intelligent basis for merely hoping that such changes and their consequences will go away and leave us more comfortable than we have been.

May I suggest a sample group of such changes, ones that seem to me to be of notable significance to the packing industry? For brevity and clarity, I am purposely leaving out some points that might logically be included. Here is the abbreviated list:

1) We have moved into an era of almost startling abundance. This does not apply only to food. There is no significant product or service important to the consumer market that is not available in relative abundance. What I am talking about is a matter of degree. The American economy traditionally has been characterized by abundance, but the degree is greater than ever. Certainly among foods there is no significant product for which there are not numerous, desirable alternatives. In consequence, the bidding and the struggle for consumer favor are more intense than any of us have lived with before. Barring war or other compara-



"LIVELY" guests at AMI convention provide an opportunity for industry members to test their ability at judging livestock. Live steer and hog were shown in registration area where AMI visitors could deposit their livestock evaluation cards, as the man is doing above.



"COOKY" the steer, is center of attraction. During most of the time the animals seemed to take a pretty bored view of convention activities. They didn't even register.

ble catastrophe, there is little prospect that this situation will change. Thus, the drive in the market of product against product and brand against brand, is, and will continue to be, a competitive battle of only greater proportion.

2) Coupled with this first factor is the shopper—the consumer—to whom you must appeal. She is a more knowledgeable and discriminating shopper than ever before. She is highly mobile. She not only has more products available to her but she also has more alternative sources from which she can obtain them. She has an increased degree of spending power over which she can exercise discretion. Her whole budget is not absorbed in the minimum essentials of living. She can and will buy more and better food, but only when it appeals to her above the alternative uses to which she might put her money. You do not, and you cannot, approach her or treat her as though she is forced to buy your product. This, too, is a circumstance which will not

revert to its former lesser degree of application.

3) Another change is the structure of the food distribution industry beyond the packer. There was a time when there were fewer meat packers than there are today and when meat packers distributed to many thousands of small single-unit retailers. That was a time when the packing industry had more control over distribution methods and policies than is true in the present environment. Food retailing is now dominated by group managements who have displaced the less efficient, single-unit retailer. Roughly 85 per cent of grocery store sales are now in the hands of group managements, including about equal proportions of sales by corporate chains and by affiliated groups of independent retail stores.

MUCH STRONGER BUYERS: These groups are much stronger buyers than were the small independent retailers of the past. Typically, they have combined both wholesale and retail functions. They are enormously more efficient than were the food retailers of earlier decades, and these efficiencies have been brought about, in part, by shorter lines of procurement and by procurement and distribution techniques that have changed the manner in which you and other suppliers sell to them. The chance of reverting back to the food retailing structure of a generation ago is no greater than the consumer's willingness to go back to that earlier kind of food store—and that is no chance at all.

4) Still another change is that livestock marketings for slaughter are becoming markedly less seasonal. This is not a contradiction of the point made previously on seasonality. This industry, in fact, has wisely taken leadership in such developments as multiple farrowing and year-around cattle feeding. There was a time when packers operated their slaughter lines mainly during the cold months and stored product against the off season. Seasonal price variations were such that a significant contribution to industry earnings came from the storage operations. This is no longer a dependable phenomenon. In the future we should look for still smaller seasonal fluctuation in livestock marketings and, thus, a historic component of packing operations and packing earnings seems to have disappeared.

Significant as this fact may be, I question that it is the whole of the seasonality story. That is, I wonder if the remaining degree of seasonality still found in livestock marketings, especially hogs, is not even more frustrating to packinghouse management than seasonality ever was before. The reason for this lies not so much in the seasonality itself as in this next change.

5) This is the problem of labor rigidity. Stated simply, you no longer have the area of choice in labor use that you have had in the past. Variable volume from season to season, even week to week, is costly in terms of either excessive employment or of unemployment. Few other things could contribute more to the stability of your operations than would smoother volume from season to season, even from day to day. Part of the reason is the legalized monopoly position of organized labor. Part is the accepted national philosophy which favors a man's current labor in the market versus his saved labor (his capital), and this, tragically, is true even though the investment of additional capital in improved facilities and equipment is the only means we have to increase the productivity of current labor and thereby to increase wages of workers.

LABOR'S OBJECTIVES: Organized labor policy is devoted to reducing even the degree of flexibility which you now have in labor use. It is pushing toward two objectives, a restricted definition of each man's job and a guaranteed annual wage. It wants increasing payment



ADDED attraction for exhibit visitors is model Lois Fohshender (left), who shows result of bacon packaging machine to Walt Martyniuk (second from left), general provision manager at Essex Packers, Ltd., Hamilton, Ont.; Frank McRae (third from left), Marathon Packages, Ltd., Toronto, and Paul Wowk (right), plant manager for the Canadian meat packing company.

for work not done and maximum pay for those who work, even though other people are pushed out of jobs by such policy. Faced with the existing attitude of organized labor toward you, there is little choice but for you to take a realistic attitude toward your use of labor, insisting on maximum efficiency. Moreover, you cannot hold your breath hoping for organized labor's policy toward you to change.

6) A sixth area of change is in tax and depreciation patterns with which you must live. Obviously, no business decision can be made today in isolation from its tax implications. It is hardly necessary to say more, except that taxes are easier to bear in a stable business than in an unstable setting. In terms of depreciation policy, you are now allowed about 2½ per cent a year on bricks and mortar. Inherent in this figure is a 40-year life of plant for depreciation and tax purposes. Forty years is more than the productive lifetime of most men. When we build for this long, we ought to have nearly static industry techniques until the investment is charged off. Such a situation clearly does not prevail, in fact, quite the opposite. Changes have been coming so fast as to have obsolesced plant investment much more rapidly than depreciation rates have counterbalanced.

7) Still another area of change is the involvement of government in your business, both directly and indirectly. I do not mean to imply that this is necessarily or entirely bad. It simply is a trend that seems inevitably to increase. Again, the best way to meet the trend would seem to be the maintenance of maximum flexibility in your operations—and no small part of the

problem is that the flexibility which you need, instead of being maintained or increased, is diminishing around you in the meat packing industry.

Included in this involvement of government in your business are such points as public policy toward organized labor; government grading of your products; transportation policy and rate setting; the requirements of meat inspection, product labeling, ingredient control and the like.

One notable area of government influence on business generally—one that personally I find quite disturbing—has been an emerging shift in anti-trust policy. This has all the earmarks of a change from maintaining competition to a new emphasis on maintaining competitors. The Congressional hopper has been full of bills, the stated purpose of which is to maintain and strengthen competition but which actually, in many cases, would only strengthen government controls over business-management decisions and would act as a harassment to strong competitors.

RATE-MAKING TREND: Another trend in point has shown up in transportation rate-making decisions, most of which recently have set minimum rates more often than maximum rates. When government agencies take on the function of licensing businesses, they tend quite clearly to become paternalistic and take the position that their licenses must not be allowed to fail. I, for one, sincerely hope that the public-utility form of business organization, versus the competitive form, will not expand to take in more and more business functions, including your own. I am not a little fearful that such a broad extension of governmental powers may be in the offing unless the trend is recognized and effectively opposed.

8) The eighth and last of these broad changes in your operating environment to which I wish to call attention has to do with shrunken by-product values. There is an adage in this business that you "save your profits, rather than make them." This is the point that you save and utilize "everything but the squeal." I have no doubt that this will remain true. However, you are living with shrunken by-product values, and there seems to be little chance that many by-products of the industry will recover their historic significance.

Synthetics have made increasingly deep inroads into the industry's pharmaceutical products and into the uses and value of hides and leather. Since World War II, the fats economy of the country has fundamentally changed from a net import basis to the lower values incident to our having become a net fats exporter. This change has been keyed primarily to the rise of the soybean. We are not at all likely to go back to our former net fat import position, and we continue to witness the loss of domestic market for fats in such historic major uses as soap and paint. This is to say that we are on a permanently lower-value basis for fats, with consequent impact of major proportions on the livestock and packing industries.

NEW DECISIONS NEEDED: If this list of changes is as fundamental and if they are as irreversible as I believe, there is obviously little point in anyone continuing to operate as though conditions would sometime return to a more favorable pattern. If we cannot expect them to revert back, they clearly call for new basic decisions in this industry that must be fundamentally different than have prevailed in the past. They call for going back over the three different levels of decision making—what we called the operating decisions, the policy decisions and the investment decisions.

It would seem that one would begin to make adjustments at the lowest and simplest level of decision mak-

ing, that is, in day-to-day operations. If these are not adequate, and they seem to me not to be, one then moves back to the policy decisions: the product line; the sales organization and distribution facilities; the geographic area of distribution, and the policies followed in raw-material procurement.

In no small degree for many companies, changed policies on some of these points will require reconsideration of long standing investment. And then comes the question of how much capital outlay can be justified to avoid the labor cost of even one man. If \$1,000 of capital will work for \$60 a year, and if its investment is written off in 10 years, the cost per year is \$133 over the 10-year period. If a man who costs \$5,000 a year can be replaced by capital investment, you can afford an outlay of up



INSTITUTE of Meat Packing instructor Henry D. Tefft (left) pays visit to Mrs. Eva Sutherland (center), IMP associate director, and Naomi Shoop, office manager of University of Chicago Graduate School of Business, at Institute's desk in the convention registration area.

to \$37,000 to displace him (\$37,000 at \$133 per \$1,000 would cost you \$4,921 annually). (This figure ignores the depreciation and obsolescence problems.)

This gets to another question. How much can you afford to spend on an old plant at an old location before your balance of labor and capital costs plus your location disadvantage, if any, would dictate that you should abandon the old plant, sell it and the site for what you can get and start over again with a new investment in a new location?

What I am saying, in essence, is that it is open season for review and reconsideration of many past decisions in many units of this industry.

TIGHTER CONTROL: If circumstances surrounding the industry have so changed that many operating concepts of the past are no longer valid, how can a new pattern be developed and implemented? Summarized in its simplest form, tighter management control is indicated. That is easy to say, but what do we mean when we say it?

Perhaps some clues may be found by looking at various segments of the business. These vary widely from company to company but inevitably include some combination of slaughter, storage, processing and marketing. In a further breakdown, any of these functions may be more finely departmentalized if so doing results in more efficient operation or in tighter management control of results.

The presumption is, obviously, that each department of a company should make a profit or, if it does not, it should be justified as being essential to some other department or function in the company. Tighter control might switch an unprofitable department into a black-in-k figure. Or, conversely, tighter control might reveal

that a department or function which was important in the past might better now be dropped.

A case in point, for some companies, might be the storage of green pork in seasons of relative abundance against a prospective price increase in seasons of relative shortage. In earlier days, storage was inseparable from pork processing because of the three-month or four-month period involved in curing. Moreover, storage was successful because of large seasonal swings in supply and price. Now, however, two major changes have occurred: quick cure and smaller seasonal price variations.

In the past, seasonal price changes were so regular and of sufficient size that green stocks put down in winter for take-out in early summer could hardly have been called speculative. It was almost a sure thing and, therefore, was standard operating practice in the industry. There are still price fluctuations from one period to another—the early summer rise this year being a case in point—but these fluctuations no longer are as firmly seasonal as in the past. In fact, the larger price changes have become distinctly erratic. Thus, in corresponding degree, green storage *now has become speculative*. How much capital facility can be justified for what has become a *less regular and speculative* function instead of a logical, regularly justified operating use?

Certainly, different managements will answer this problem in different ways, but it seems to me an unsatisfactory answer merely to hope that a historic pattern will be a continuing justification. When green pork can be put down against a known later market, that is one thing. (Perhaps even then commercial storage should be used.) But if the seasonal price patterns have changed as much as I think they have, purely speculative storage is likely to be something else. This is one illustration of our point of tighter management control.

BIGGER QUESTION: A still bigger question is profitable operations in kill-and-cut departments. Many of you complain that your slaughter operations (especially hog slaughter) go in the red more years than otherwise. Or even more commonly, you say that kill-and-cut is profitable only when livestock supplies are abundant. If this is your experience, it might be useful to recognize that, cyclically, hog numbers are down as much as they are up. If it is indeed true that you need abundant supply to make money, you will on the average make little or nothing. The reason is that abundant supply is not available sufficiently often to more than counterbalance the red figures you accumulate in times of shorter supply. For improved earnings, it is imperative to find a way out of this dilemma.

When slaughter supplies decrease, the amount of meat obviously goes down and the equilibrium price of meat at retail just as obviously goes up. The retail price rises until a new balance is achieved between meat demand and the supply available. This justifies a high price for livestock. How much higher? Higher by the live-weight equivalent of the higher retail price, less any increase in the unit costs of handling lower volume? This is the amount you can pay for the shorter supply without biting into your own margins. But how much do you pay? The evidence of the market is that many of you fight aggressively to keep your *own* volume at normal level, trying to force the cut-back onto someone else. The record of your earnings (on an industry basis) is that you get so hot and bothered about maintaining volume that you pay more than you can cut out and, therefore, you go in the red. An unjustified price for livestock will not increase your supply when the animals do not exist.

An axiom of the packing industry long has been:

"More volume, lower overhead, more earnings." Another way of saying this is: "Get more volume whenever it will cover direct costs and make any contribution to overhead." These lessons have been learned too well. Nothing is wrong with them except that the analysis of what they imply typically has not been carried far enough to be sure that more volume will produce more earnings. Often it does not. The pursuit of volume has two major weaknesses: 1) It leads to a policy of "produce more goods and then worry about selling them," and 2) It assumes that all other conditions remain equal as volume is increased.

FALLACY ILLUSTRATED: The first of these weaknesses leads to trouble because so typically it results in product looking for a home, distress product. The second one simply is not true; all other things do not remain equal in the pursuit of volume. Illustrative figures in Table 1 clarify and emphasize this fact. In these figures

TABLE I
Illustrative Figures of Volume, Cost, and Earnings
Hog Operations—kill and cut department
(Operating rate, 400 per hour)

Weekly	Vol.	Hrs.	Cost	Value	Gross	Fixed	Direct	Net	Earnings
			of	of	margin	Over-	Cost	gin	x net
			operation	hogs	cut-out	head	head		margin
hogs	live	cwt							
12,800	28,160	32	\$15.80	\$18.20	\$2.40	\$.75	\$.84*	\$.81	\$22,810
14,400	31,480	36	15.90	18.10	2.20	.67	.75	.78	24,710
16,000	35,200	40	16.00	18.00	2.00	.60	.75	.65	22,880
17,600	38,720	44	16.10	17.90	1.80	.55	.84**	.41	15,875
19,200	42,240	48	16.20	17.80	1.60	.50	.92**	.18	7,603

*Higher because of standby labor.

**Higher because of overtime.

we have assumed a hog line handling 400 head an hour. In a 40-hour week, 16,000 head would be put through, running to 35,200 cwt. of live weight. We have assumed hogs to cost \$16 and to cut out \$18, leaving a \$2 gross margin. Fixed overhead is 60¢ per cwt. and direct (variable) costs are 75¢ per cwt. On this basis the line produces \$22,800 of weekly net earnings.

In the Table 1 figures, note the following:

1) If an effort is made to get more volume, even in times of normal supply, it is necessary (a) to go farther to get hogs, and (b) to incur additional costs to bring them in. It is not unrealistic that an additional 10 per cent (17,600 vs. 16,000) makes the weighted average cost 10¢ per cwt. higher, laid in—or that 20 per cent more will run the cost up still another 10¢. This is merely the first of a number of factors that do not remain the same in the pursuit of more volume.

2) With more product to move, it is necessary to sell harder, and usually second-best markets have to be utilized that return a lower average price. In these figures we have illustrated this fact by a weighted average price of 10¢ less for each 10 per cent increase in volume.

3) Note that these cost and cut-out realizations work both ways on the gross margin—adversely with larger volume and favorably with smaller volume. Any of you may challenge that these figures reflect what happens, or would happen, in your own company, and yet they are far more realistic than to assume no change in cost and price as your volume might be varied.

4) The effect of variation in volume on overhead cost per unit is, of course, exactly what the volume philosophy of the industry has held it to be. The overhead goes down with more volume and up with less. But the variation is modest in cents per cwt.—up 15¢ on a 32-hour week, down 10¢ on 48 hours. Any of several other factors in a typical operation will cause as much or more variation in net earnings per cwt. handled.

5) Note next that even the direct costs do not remain

the same outside of the 36-40 hour base. At less than 36 hours, stand-by labor increases the unit cost; above 40 hours, there is overtime pay. On an overtime basis, the direct costs go up more than the fixed go down.

6) The pay-off is shown in the net earnings column. These figures reflect what I suspect is the truth for this industry, even though it is the exact opposite of the operating philosophy that many companies have followed. That is, you might better err on the side of smaller volume than on the larger volume side.

PROCESSORS DO BETTER: The earnings record of the packing industry has revealed, year after year, that companies whose total business is processing have made better earnings than companies that also maintain kill-and-cut departments. Where processing is confined to adding services and value to a highly desirable consumer product, the processing function should be successful if costs are kept competitive and if the product is well sold. We are living in a time when consumers want highly convenient, easy-to-prepare foods much more than in the past and when they willingly pay competitive costs for such services. This is a characteristic of today's market that should be foremost in the thinking of any food handler. It is a trend that almost certainly will result in more completely processed foods in the future.

On the other hand, I am not convinced that companies which are strictly processors have made better earnings solely because of their processing functions. Such companies are buyers of green product, and their earnings may be reflecting an avoidance of the kill-and-cut losses that have been so characteristic in companies that are also slaughterers. If this is the case, as I think it is, it indicates that slaughterers might move most strongly toward better earnings by tightening up—or in some cases eliminating—their kill-and-cut departments. Slaughter is, after all, only one way to obtain green product. If it cannot be performed at a profit, a better alternative (again, for some companies) might well be the green market as an alternative source of raw material for processing.

Fixed costs—both overhead and inflexible labor costs—are the factors that appear to have pushed many kill-and-cut operations into red ink with great regularity.

If, first, kill-and-cut is normally a relatively unprofitable department in a company and if, second, it may be regarded as only one alternative method of acquiring green product, better earnings might result if slaughter operations were reorganized and reduced to a normal rate somewhat below the green-product needs of the company's processing departments. Such an adjustment would regularly put the company in the green market for some raw material. On this reduced basis, with correspondingly less difficulty in acquiring slaughter supply, the slaughter operations might be scheduled in the black for more weeks of the year. If, then, at times when kill-and-cut would still be in the red, slaughter might be temporarily dropped back to a still lower rate and more supply acquired in the green market, better net earnings might result.

USE ACCOUNTANTS: I am fully aware that such a suggestion breaks with the long-held operating philosophy of much of the industry. On the other hand, there are companies that have made such adjustments successfully. For more companies it might well be worth careful analysis. Your accountants could give you the information. However, they could not do it alone, because top management decisions would be involved in changing the company's facilities. Accountants should be an arm of management in such matters in greater degree than they have been in some companies.

Earlier I suggested that earnings result, obviously, from a combination of volume and margin. Let's put this in a formula: $V \times M = E$. The V is volume; the M is margin; the E is the desired end-product, earnings. This is an appropriate formula to be used as a tool for better earnings. It is, however, a deceptively simple formula. The jokers are mostly hidden in the "M"—the margin. Margin involves, consecutively, the cost of raw material, the cost of processing and the final selling price. In other words, it includes all the problems you struggle with, except volume.

Numerous analysts of the industry have made the constructive suggestion that margin instead of volume should receive the major attention of management. They have maintained that volume should be allowed to vary—indeed, should be consciously varied—as necessary to maintain margin. This is a healthy concept because without adequate margin, volume cannot generate earnings, and negative margin generates losses. While I think the maintenance of margin is highly important, I would like to go a step further and suggest that both volume and margin should be consciously varied, as necessary, to hold earnings. In other words, earnings should properly be treated as the only desired constant in the $V \times M = E$ formula. Neither volume nor margin has any significance except in contributing to earnings.

Now I will try to summarize and bring into focus the several points I have previously been discussing.

PLANNING FOR PROFIT: A question on which the accounting committee of the Institute has been working, and which was posed when this discussion was first suggested, is whether the earnings of a packing company can be planned and budgeted in advance. I am convinced that the answer is yes and am convinced also that with appropriate plans and budgets the earnings of any packing company can be increased. Budgeting is, in fact, nothing more (and nothing less) than planning for profit. I know that it has been widely discussed in the packing industry but also that it has not been widely applied. One reason is that the budgeting approaches commonly used in many other kinds of business will not fit the packing industry. You have real difficulty in projecting sales, or even selling prices, largely because of fluctuating supplies and prices of your raw material. Thus, you are considerably stymied from preparing sales budgets, either in tons or dollars, and then fitting all other operations to the sales figure.

There is another approach, however. Some of you may say it won't work, and some of you will find that it will. You can budget an annual earnings goal. This would be done for a company by budgeting an annual earnings objective for each department. It would be worked out with the departmental head who would be responsible for carrying it out. It would be set high enough to keep everyone in the department on his toes and low enough to be realistically possible of attainment. The aggregate of departmental earnings budgets would be the projected earnings of the company.

All this is easy to say. I am not minimizing the problems that lie behind it. A departmental budget would be based on the same simple formula: $V \times M = E$. Volume and margin would have to play the counterbalancing roles that would give the earnings objective. Smaller volume presumably would carry about the same direct (variable) cost per unit as larger volume but would carry more fixed cost. I am convinced of the principle, however, that smaller volume—in the market situation of most companies—would realize a higher average selling price (refer again to Table 1). This better price might well offset higher fixed cost, produce more net margin and give equally good or even better

ings

Earnings
r. (volume
n x net
margin)

81	\$22,810
78	24,710
65	22,880
41	15,875
18	7,403

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OCTOBER 1, 1960

earnings for the company than would larger volume.

I noted before that this is the opposite of much thinking and present practice in the industry. However, more than one successful competitor has made it work. The point is that volume and margin are variables which typically move in opposite directions in the pursuit of earnings. This, I expect, is an economic truism in this industry, which all too much of the industry has ignored. The economics of volume and margin as *inverse variables* has had wholly inadequate study and application among packers.

Still other problems will complicate internal department budgets. One of these is the transfer price in the flow of product between departments. If you transfer at cost, how is the cost to be calculated? This raises the specter of joint-cost to which we referred earlier. A practice that recently has been coming into use in part of the industry is much less complicated and more equitable. It is to transfer at the price which could be received in the best alternative market outside the company. In essence, this means transferring at market prices instead of an internally developed cost figure. The principle is good because it neither penalizes nor favors one department against another, and also because it can contribute greatly to pinpointing losses or profits to the departments where they belong.

MAJOR DIVIDENDS: Several major dividends result from setting up realistic budgets by departments:

- 1) They identify where profit can be expected and about how much. Variances caused by erroneous assumptions of volume, or cost, or margin or selling price, of course, will occur. Experience, however, will tend to correct the errors and narrow such variances. In time, more profitable departments can perhaps be expanded versus other functions that contribute less to earnings.

- 2) Budgeted goals have a remarkably good psychological effect on department management. No worthy manager will want to participate in the development of a realistic budget, accept responsibility for it and then fail to achieve it. This does not mean he will always make the goal. But if he does not, he will want to know why and correct the causes as much as management.

- 3) Final transfer of finished product to the sales department at known cost squarely places responsibility where it belongs for maintaining selling prices that recover both full costs and budgeted earnings. *Sales can be budgeted on a short-time forward basis.* The structure of today's food retail industry, which procures from one to three weeks ahead (instead of on a day-to-day basis), should be regarded as assisting the packer's sales program instead of working against it. The sales department should, of course, participate in the determination of volume produced by the company. It should then be expected to maintain the scheduled selling prices instead of, all too frequently, looking for a place to unload distress product.

Such departmental budgets as we have been discussing—and thus in the aggregate, the company budget—probably should be worked out at least a full year in advance. It is not as absurd as it may first sound to project them, tentatively, even farther ahead. However, to be workable and for management to keep control over performance, they must be broken down to shorter accounting periods. This certainly should not be less frequent than monthly analysis of performance, and everyone would perform still better if departmental operations, relative to the budget, are reported and studied weekly.

I am not minimizing the work involved in setting up such a budget system in a company where it is not now used. The background information on departmental

capacity, sales potential and costs (fixed and direct) is considerable. However, all of you have accountants and a controller, and you might have (or come to have) a budget officer in the same division.

LOOK FORWARD: Accounting, except for tax and financial purposes, is justified only as a tool of management. If, to use an analogy, packing companies can no longer fly by the seat of their pants—if instead, the economic environment has become so complex that the flying must be done by instruments—then obviously the instrument dials must give the right readings. Your accountants are the people who can point out the readings on the dials. What is necessary in many companies is a shift from accounting records that reveal the company history to a new use of the controller and the accountants for projecting the company's future.

I know some of your accountants and controllers well enough to know that they are both interested and able to move in this direction with you who have top management responsibility. They are the people who can help you to convert $V \times M = E$ into the reality of improved earnings. Many companies in this industry need to upgrade their accounting or controller departments to top management level. They need to look to these departments for the accounting tools which are essential in planning for profits and for auditing management's performance to see that planned profits are achieved.

This upgrading of accountants has been done by some companies in this industry. On the whole, however, the industry is far behind in this respect when compared with other industries and particularly with some of the more profitable industries, such as automobile manufacturing, oil and others.

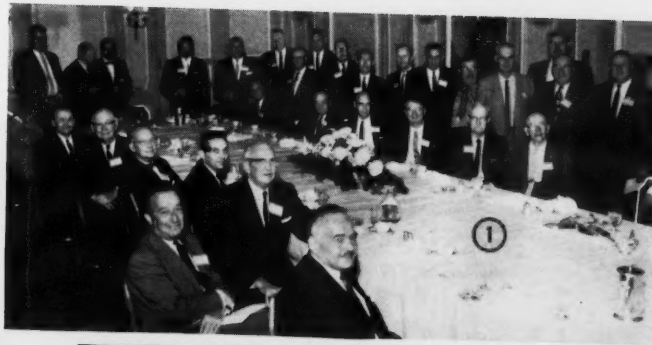
You are missing a real bet if you are not looking to this division of your business as a part of your top management team. The field of the controller is a broad one. But if we look back at the problems, decisions and procedures I have discussed with you, it quickly becomes evident that these are top level matters where planning and policing by your accountant or controller are necessary to provide you, as the head of your company, with the management tools you need for carrying on the operations of your company successfully.

I am conscious that this presentation has followed the optimistic picture of the 1960s presented to you earlier—and that against that optimism, I have been talking to you as though the packing industry is a poor cousin of this threshold of a presumably soaring decade. I would like to say of the 1960s that much of the optimism presented to you earlier is probably true. We will have a rapidly increasing population, many more teen-agers, a new upsurge in family formation, rising consumer income and the like. But I expect also that we will have the most intensely competitive situation for American business that we have ever seen. Profits will be made in the 1960s, but they will have to be earned in a tough, competitive arena. More livestock will be produced, more meat will be processed and consumed. But who will process and sell it?

Some of you by the end of this decade will be out of business; others will have had the best 10 years in your history, but for any of you, success is going to be competitively tough. My guess is that those who succeed will give more attention than ever before to the economic interrelationships of "V" and "M" and their combined relationship to "E" in the formula $V \times M = E$.

Moreover, in striving for better earnings, I believe the more successful among you will develop tighter budgeting control of your companies than you have yet used, and that you will do it by the use of tough but realistic departmental responsibility budgets.

For 50 or More Years of Meat Industry Service



1. Fifty- and 75-year industry veterans received their service awards at a special breakfast. 2. Seventy-five year man Felix Gehrmann, vice president and one of founders of Reliable Packing Co., with president John Thompson and vice president Richmond Unwin. 3. Cudahy Packing Co. controller C. A. Bastow, L. F. Long, president, and P. B. Thompson, executive vice president, congratulate 50-year J. W. Christian, retired vice president. 4. Herman Seinworth, manager of industrial relations for Swift & Company, honors A. J. Schaeffer, J. A. Liston

and J. J. McCrimmon. 5. Rudolph A. Heckscher and Ellard L. Pfaelzer clasp hands with C. E. Sheehy (center), senior vice president of Armour and Company. 6. Morrell contingent of Jacob Kmiecik, Charles Hoffman, John Burns, Al Applegate, T. R. Scott and Clarence Sall, manager of the company's Sioux Falls plant, with W. W. McCallum, the president (center). 7. Veteran executives Ernest S. Holmes, 52-year man and president of John R. Daily, Inc., Missoula, Mont., and Charles G. Buchy, a 59-er and the president of C. G. Buchy Co., Greenville, O.

Ultrasonic Equipment Holds Promise As a Means of Measuring Meatiness in Livestock

Dr. J. R. Stouffer of Cornell University demonstrates device useful in selecting breeding stock for meaty characteristic.



AN ACCURATE quantitative index of muscling and fat in slaughter livestock and carcasses would be of immeasurable value to the livestock and meat industry. Many direct and indirect methods for determining "what's under the hide" have been investigated by research workers.

Ultrasonic probing is one of the more recent evaluation techniques under study, and it is my pleasure to discuss and demonstrate the equipment and technique for you. I want to emphasize that this technique is still in the developmental stage and a lot more basic work needs to be done before it will be ready for widespread commercial application. However, our results have been quite encouraging, and we feel that ultrasonics will play an important role as an evaluation tool in the near future.

The principles involved are not new, as the echo method has been used for some time for such purposes as submarine detection by ships (sonar) and for the non-destructive testing of metal and other materials. Ultrasonics is the term applied to sound waves of higher frequency than can be heard by the human ear, that is, above 20,000 cycles per second. We are using a frequency of 1.6 megacycles (1,600,000 cycles per second) in our present equipment.

WHAT HAPPENS: The behavior of sound waves of this frequency is very similar to light waves in that they can be reflected, yet their behavior is different from light waves in that they will pass readily through dense matter and liquids, such as living tissue. We utilize both of these characteristics to good advantage in animal evaluation work in the following manner: The high frequency sound waves are generated and sent out in a narrow beam from a transducer or search unit that rests on the animal's hide. The waves penetrate the animal until an interface, such as the junction of fat and lean, is encountered. Some of the sound waves are reflected back to the transducer, while the others continue through the muscle and are reflected back from subsequent interfaces. These reflected signals are amplified and appear on a cathode ray tube and are read as the depth of the various interfaces.

The ultrasonic equipment that we are using consists of: 1) A slightly modified metal flaw detector for generation, detection and display of ultrasonic waves and signal; 2) A transducer which sends out and receives the sound waves, and 3) An electromechanical scanning device with a Polaroid camera for recording the signals.

A black rubber belt is positioned across the animal's back at the last rib and is used as a guide and as a stabilizing unit. Before demonstrating this technique, I would like to point out the reasons for studying the specific location on the live animal. Our objective was

to develop a method of accurate quantitative measuring of muscling and fat. To do this required a location that would provide ease of measuring on the carcass. Beef carcasses are routinely quartered between the last two ribs, and this provides a cross section of a major muscle that can be measured easily. This location has by tradition been used as a criterion in carcass contest judging, and it is also an area carefully scrutinized by beef buyers when they visit your wholesale coolers. The comparable site is also located in the live animal as the contour and location of the ribs can be followed with ease.

DEMONSTRATION: Now, with the cooperation of the steer, we will demonstrate our technique of taking an ultrasonic cross sectional picture at the last rib. Since sound waves of this frequency will not penetrate through air, we apply motor oil to the area under examination in order to insure good transmission of the sound waves. I mentioned earlier that the various interfaces directly under the transducer are indicated as signals or pips on the tube. It is possible to record a complete cross section of the animal by synchronizing the movement of the back of the camera with the movement of the search unit on the animal's back. We accomplish this through our electromechanical scanning device. Now, we will proceed to make such a record by opening the camera lens at the beginning of the scanning process and closing the lens at its completion in order to get a time exposure photograph.

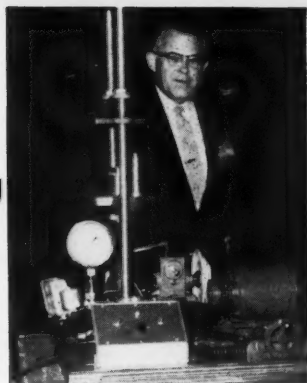
The major distinguishable parts of a rib steak are the external fat layer, the spinose process of the backbone and the rib eye muscle. Since we know the relative scale of the photograph, it is possible to correct the measurement of rib eye area and external fat thickness to determine the actual values in the live animal.

Anytime that we attempt to visualize potential uses of any new tool, we are crystal-gazing, but I am confident enough of the principle of ultrasonic evaluation to mention a few possible ideas that have come to me. The ability to select superior bulls, boars or rams would certainly aid in the rapid improvement of livestock. Closely allied to this application could be an evaluation of animals at all stages of maturity. By following the muscle and fat development in an animal from birth to maturity, we might find that the superior animals could be identified at an early stage, such as at weaning time. Also, we need to know the relationship of the muscle size of a 12-month to 18-month bull and an old bull. What effect does age or condition or both have on muscle size? There are a lot of practical applications for such equipment other than just a research tool.

This equipment would not be very satisfactory for use as a slaughter livestock buying tool at present.

USDA Research on Method of Determining Raw Meat Tenderness is Making Progress

Dr. R. L. Hiner, chief of Meat Quality Laboratory, shows a rapid mechanical device and describes chemical processes.



BEEF has become our most popular meat during the past couple of decades. This is not surprising. I am sure you have all heard the saying: a "golden browned steak" for a celebration; a "standing rib roast" for a formal dinner; "stew" for a hurry-up meal; "hamburgers" prepared over a charcoal grill for a picnic, and a "tasty soup bone" to add zest and flavor to the dinner appetizer. This is not enough to assure the housewife that her efforts will stand the test. There is always the question in her mind as to how tender that steak, roast or stew is. Numerous consumer surveys and reports show that tenderness is the one characteristic that is foremost in her likes or dislikes. Yet, the reason that one steak is tender and another that appears identical is not is poorly understood.

There are numerous theories about how to select meat for tenderness and how to cook it to develop or retain tenderness. These theories seem logical to many people, but none is based on or stands the test of the research laboratory. Our challenge is to find a reliable indicator of tenderness of the animal in the feed lot or the cut in the meat market.

We, as research workers, have learned that tenderness is not a simple thing but a very complex attribute of meat quality. It is undoubtedly a combination of numerous factors, no one of which alone is the answer. We know, for example, that connective tissue has been thought by many to be the major factor in lack of tenderness, but part of the connective tissue is collagen,

which gelatinizes upon heating; the other part is elastin, which does not change with heating. I believe it has been quite well established that age of animal is a factor; the older animal at slaughter generally is less tender. I have found that the size of muscle fibers is a factor; the larger the fiber, the less tender. At one time I speculated that size of fiber and tenderness appeared to be associated with the skeletal muscle, a skeletal muscle being more tender than a working muscle.

HIGHLY HERITABLE: In some of our work with beef, we noticed that meat from the samples representing certain sires was more tender than that from others. This led to a study of inheritance of tenderness. Using rabbits as the experimental animal, it was established that tenderness was highly heritable. Since then, numerous studies have confirmed this finding.

Other factors that may or may not fit into this complex makeup of tenderness are marbling, amino acid composition, water binding capacity and, undoubtedly, many others of which we are not aware.

Since most tenderness study results have been obtained from heated meat samples and are not useful for an immediate appraisal of tenderness, our activities turned to what can be done about measuring tenderness in raw meat that will be useful not only to the breeder, but also to the wholesaler and retailer. Our first effort was to examine the mechanical instruments that were available. The Warner-Bratzler shear, the most widely accepted and used mechanical instrument for testing tenderness of cooked meat, had shown no evidence of being useful with raw meat.

Our next idea developed from a realization that when one chews a sample of meat, intermittent pressure is applied by the chewing action. This chewing action is a squeezing motion in which meat is squeezed between the teeth, producing meat juices and exudate. After considerable experimentation with caulking guns and any other instruments in which we could squeeze meat juices from the sample, we realized that a small hole could be drilled into the bottom of a cylinder and, using a plunger in which pressure could be applied, we might have better success. Having an old Carver laboratory press and the necessary cylinders, we tried it. The instrument has since passed through a number of modifications, and it is still being modified and changed.

The one factor that encouraged continued effort was the repeatability of results. Using "Play Doh" as our homogenous material, we were able consistently to duplicate the pounds of pressure necessary to squeeze the first bit of material through the orifice. We also noted that as the "Play Doh" dried out, more pressure was required. The same was true with closely adjacent samples of raw or cooked meat. At the 1958 Institute of Food Technologists meetings in Chicago, our laboratory reported that the correlation between raw meat aged



PAUL ZILLMAN (right), director of the livestock department of the Institute, assists in taking photographic reading of rib eye of live animal (see page 74).

two days and adjacent samples tested by the palatability committee after 10 days ageing was .79, a most encouraging result. Since then, a more sensitive instrument has been developed and, probably due to a more accurate endpoint determination, the latest correlations are not as high but still are highly significant.

PEA-SIZED SAMPLE: Our next step was to investigate the size of sample necessary and also how large a biopsy sample could safely be obtained from the live animal. The largest biopsy needle available removes a small pea-sized sample; therefore, we reduced the size of the cylinder and orifice to accommodate this size sample. As a result, the pounds pressure required to squeeze the first exudate through the orifice was reduced from over 300 lbs. pressure for the less tender meat to 10 or 12 lbs. This is causing some concern because overlapping, especially in the doubtful areas of tenderness, may give a misleading interpretation. At present, a cylinder of intermediate diameter is being machined. This will require a biopsy cube sample of about one-quarter of an inch in size. This is believed to be small enough to avoid undue difficulty in healing of the wound.

The operation of the instrument is fairly simple. The sample of meat is placed in the cylinder with the researcher making sure the fibers lay on a horizontal plane. A rubber gasket is then fitted in on top of the sample to prevent any of the meat juices from backing up around the cylinder. The plunger is inserted next, and the assembled chamber is placed on top of a steel block. This block has a section removed and a plastic containing a brass rod which acts as an electronic trip is inserted. The brass rod is connected with an electronic system that de-energizes the hydraulic system when contacted by any slightly moist material. As soon as the chamber is assembled, the motor is started, which closes the solenoid. The uniform step pumping continues until the meat sample is extruded. The first tip of extruded meat sample touching the electric probe de-energizes the motor and energizes the solenoid, thus releasing the pressure. At this exact moment, the recording hand on the gauge drops, leaving the lazy hand to mark the pressure needed to extrude the sample.

The uniform step pumping is believed to be an essential part of the operation. The present rate of step pumping is 1.5 strokes per second. Apparently up to this rate of stroke movement little differences were found, but more rapid movement did change our results.

At the present time, we are studying the possibility of predicting tenderness of the mature beef animal. Biopsy samples are being removed from the longissimus dorsi muscle of about 90 six-to-eight-month-old feeder animals. Considerable variation has been found among these feeder animals. We are waiting until these animals are ready for slaughter, which, unfortunately, will not be for nearly a year, to see how early evaluation of the tenderness of each animal holds up.

Since it is recognized that mechanical devices are quick methods for determining tenderness and, therefore, are not as reliable, effort has been directed to the chemical aspects of tenderness to check the pressure instrument. Chemists have tried to separate the connective tissue from meat, measure it, and show its relation to tenderness. The results of these studies have been limited and at variance. Several years ago our laboratory undertook to make a study of connective tissue and its relationship to tenderness. After considerable study and experimentation, a modified procedure for determining hydroxyproline was developed and has indicated considerable promise as a reliable method for measuring tenderness. Hydroxyproline is

an amino acid and, fortunately, it appears only in connective tissue and is present in amounts that can be measured by the chemist.

HYDROXYPROLINE TEST: The technique developed in our laboratory shortens the time from six to three days. Instead of discarding the fat fraction that is extracted from the lean, it is recovered and the hydroxyproline determined. This hydroxyproline is added to that from the extract to give a total present in the muscle. It was found that approximately 78 per cent of hydroxyproline was recovered in the fat fraction of the hydrolyzates from longissimus dorsi muscles that contained more than 11 per cent ether extract fat. In those samples that were more tender, as the Psoas major which contained about 10 per cent ether extract fat, there was less hydroxyproline, accounting for about half of the total. A highly significant relationship was found between hydroxyproline and tenderness, the correlation being about 0.82. We are now checking out this procedure with a large number of animals. Also, using a micro technique, second biopsy samples from the feeder animals referred to earlier are being analyzed.

To find some properties which reflect quality of meat, variations of free-amino acids from muscle to muscle and from animal to animal are being studied. While free-amino acids in themselves do not render meat tender or tough, varying amounts of free-amino acids may be present in muscle fluid for the formation of skeletal muscles during development. A relationship was sought between meat quality as represented by tenderness and relative amounts of certain free-amino acids present in muscle.

Paper chromatography was the method used to study free-amino acids in muscle. Meat extracts of a definite concentration are spotted in Whatman Number 1 filter paper for both one-dimensional and two-dimensional chromatography. It has been interesting to note that in general the variations of the leucine and iso-leucine peak on the curves obtained by use of a photoelectric densitometer follow a pattern similar to that shown by variations in tenderness as indicated by a taste panel. The more tender cuts contained more of the leucine iso-leucine as shown by the density of the spots. Details of this method and the results are now in manuscript form preparatory to approval for publication. This method is also being used to predict tenderness, using a third biopsy sample from the longissimus dorsi muscle of the 90 feeder steers. Except for a few instances at the beginning of our biopsy work, these three procedures have shown the same trend on tenderness.

Continued studies are being made of these three approaches to determine tenderness in both raw meat from chilled carcasses and biopsy samples in young animals. To improve tenderness in meat through breeding is a long-time process. Our present method of panel testing a given number of meat samples from the offspring of one sire requires well over two years. It has been reported by geneticists that if we can accurately predict how tender the meat of an animal is at the time selections are being made for the breeding herd, we can speed the tenderization of beef through breeding by a significant degree.

To summarize, we are in the experimental stages of developing techniques for the measuring of both raw meat samples and biopsy samples. The following techniques are being developed: The pressure instrument (a quick mechanical method); a study of hydroxyproline, a longer method that would be most useful in selection of breeding or feeder cattle, and the study of the variations in amino acids by a chromatographic method, which requires about one day.

Growing Discrimination Against High Finish Beef May Force New Basis for Evaluation

Agriculture Dean Elmer R. Kiehl, University of Missouri, sees many forces working to make leaner, tender beef a new "choice."



IT IS worthwhile, I believe, to remind ourselves at the outset that our economy is a market economy. It is an economy where producers produce goods and services to sell to others, that is, to consumers of our products. This is the framework in which livestock producers, market agencies, processors and retailers operate. Given this framework, in which we as individuals operate, we have come to recognize the influence of the consumer. We have said all kinds of things about the consumer.

We have said in moments of gratuitousness that Mrs. Consumer is the "chief architect" of the future of our product. Indeed, some have gone so far as to say that she is the chief force in the future of our business and industry; that success of the business is dependent on how well the product meets consumer needs. On the other hand, many of us have said that, after all, the consumer "does not know what she wants" and, furthermore, she cannot select, for example, the qualities of beef that coincide with our own particular "expert" judgments of quality. Studies are cited often to show that consumers cannot select qualities of beef according to the criteria that experts have set up. Therefore, it is reasoned, the consumer must be ignorant. Although she may be ignorant of the niceties of detail of our product, she does make daily choices of one meat product over another, or between meat and some other product, and therefore she cannot be ignored. We are concerned about the product choice she makes.

Certainly in the final analysis the consumer is all powerful—powerful in the sense that she need not buy beef in view of the alternative products available. What worries us most is really her veto power in not selecting what we have in the showcase. The self-service displays today focus attention on the mute appeal of the product and on its ability to satisfy consistently over time. A product, no matter how technically perfect, can fail if it remains in the self-service case. It is against this background and market environment that studies have been undertaken since World War II to determine what consumers prefer in many product lines. The early studies generally attempted to find consumer preferences that were popular. Yet, many studies did not yield answers to help us design products that would give consumers consistent satisfaction over time.

CENTRAL PROBLEM: The central problem of beef is and continues to be assurance of consistent consumer satisfaction from day to day, and from cut to cut. Beef as a natural product is good. It is a prestige product, and consumers aspire to increasing consumption of it. The requirements of large scale self-service retailing in recent years, however, have placed an additional specification on the beef industry, that of assurance of built-in quality consistency.

These requirements for beef focus attention on two aspects of the beef quality problem: 1) Physiological and psychological dimensions of beef that yield consis-

tent consumer eating satisfaction, and 2) Identification of that bundle of characteristics of beef that will yield consistency in performance. Studies at the University of Missouri over the last several years have emphasized these two aspects of product dimensions. My report today is really a progress statement of a study just completed. We have time only to discuss highlights of these results and to suggest some tentative implications the results have for us.

A sample of 400 consumers was solicited for cooperation in an eating evaluation of beef loin steaks. Steaks were provided to this consumer panel for 12 weeks in four quarters during 1959. This panel was selected at random from households in St. Louis County, Missouri, and represented a rather wide range in income, education and background. These consumers rated unidentified loin steaks prepared and eaten in their own homes for overall eating acceptance. A standard rating scale, similar to that used by many food marketing firms in their own product market research programs, was used. Ratings were obtained on the basis of nine descriptive rating categories. In addition, specific ratings were obtained on tenderness, juiciness and flavor. Other information obtained included cooking methods used and degree of doneness cooked.

PRODUCT USED: This study concentrated on analyzing the product characteristics of that range of beef included in U. S. Good and U. S. Choice grades. This range of "quality" now accounts for the overwhelming share of the total block beef available to consumers. Beef short loins were purchased according to one-third of grades. That is, the panel evaluated loin steaks from low Good, medium Good, high Good, low Choice, medium Choice and high Choice. There were, in essence, six qualities or grades evaluated in this study. We were well aware of the difficulties of maintaining consistency within each of these six quality ranges. Loins were selected from ribbed down carcasses and at least two evaluations by competent graders were made to reduce variations.

Loins from 560 different cattle carcasses ranging from 600 to 650 lbs. were processed into 5,600 uniform steaks and presented to the consumer panel. In addition, an expert laboratory panel taste tested three steaks from each loin. Mechanical shear measurements were made, using standard shear machines on steaks from each loin. This study, therefore, was an attempt to tie several parts together. It was a large and expensive project.

The study was designed to provide cross-checks and controls on various estimates and measurements to determine quality evaluation of the sample steaks. Analysis to date leads us to believe that we can draw some useful inferences. It was possible from this large sample to make some estimates of the average ratings of acceptance of loin steaks by one-third grades. It should

be emphasized that these ratings represent overall acceptance ratings. While it would be difficult to weigh the relative importance of tenderness, juiciness and flavor criteria in these ratings, we are certain from other studies we have made that tenderness is the one criterion having overwhelming importance. Certainly tenderness ratings were more critical in the lower quality range.

HOW STEAKS RATED: Acceptance ratings increased as "we moved up" in grade categories; that is, Choice grades on the average rated higher than Good grades. This was expected. However, the difference between grade categories might be smaller than many of you expected. Low Good rated 3.0, while high Choice rated 2.3. The average ratings fell within the second and third points on the scale; that is "like moderately" (3.0), and "like very much" (2.0). These are highly acceptable ratings. Remember, these are averages of many loin steaks within each grade category.

Now let's look at ratings in another way. We know that there are differences between loins of the same grade. Within each grade category, we found considerable variation in average ratings (see Table 1). Those with low acceptance ratings are from those loins whose steaks beef consumers are likely to be unhappy about. It is also noteworthy that variation occurs in each grade category and is not confined to the "lower" grades. In fact, there are loins in high Choice that are no "better" than the average of low Good.

There is, however, a clustering or bunching of the ratings. There is a tendency for the middle one-half of the loins in each category to move upward as we move up the grade ladder and for the range of variation to be less in the Choice grade, but the variation in acceptance among loins constitutes a problem in eating satisfaction and performance of a particular grade. The low ratings in each category result in unsatisfied customers. While the average ratings of many loins within a grade can be quite acceptable, it's those "odd-balls" or "counterfeits" that cause merchandising problems. This is the problem of grade and brand standards and one that requires improvement of methods of selection and possibly additional criteria of quality identification.

Packers and retail merchandisers are concerned with reducing the odds of having unhappy customers. Prod-



BETWEEN sessions, conventioners inspect exhibitors' displays. Shown here are passers-by admiring pre-packaged meat display of one supplier to industry.

uct uniformity is important in mass retailing and to producers, as well, because unhappy eating reduces demand. Since most dissatisfaction in beef arises from lack of tenderness, it has led to development of several mechanical and enzyme tenderizing processes. Some have been developed which may reduce the risk from lack of tenderness, particularly in the lower grades.

MARBLING DISCOUNTED: Another facet of the study involved an analysis of the marbling of the loin eye and its relation to eating acceptability. We all know that traditionally considerable weight has been given to the degree of marbling as a criterion of eating qualities. It was thought to be an indicator of the length of concentrated feeding of the animal and, thus, an indicator of eating expectation. Photographs were taken of loins and matched with standard official marbling scores. Photographs of the loins were compared to eating acceptability. There was virtually no correlation between the marbling scores and eating acceptability ($r = .17$). The average eating acceptability was similar for all degrees of marbling except for the very extreme.

The scatter and variability of marbling scores in rela-

MUCH BEEF from Good and Choice grades is very similar in eating characteristics, according to Missouri study. Table shows considerable variation in average ratings within each grade category. Some loins in high Choice were rated no better than the average of low Good. Steaks were evaluated in six quality ranges—low, average and high Good and Choice grades.

Acceptance Mean Rating of Loins	LG	AG	HG	LC	AC	HC
1.5						
1.6						
1.7						
1.8						
1.9						
2.0						
2.1						
2.2						
2.3						
2.4						
2.5						
2.6						
2.7						
2.8						
2.9						
3.0						
3.1						
3.2						
3.3						
3.4						
3.5						
3.6						
3.7						
3.8						
3.9						
4.0						
4.1						
4.2						
4.3						
4.4						
4.5						
4.6						
4.7						
4.8						
4.9						

tion to eating acceptability further suggests that the association is weak. It should be remembered, however, that the carcasses were from cattle of intermediate maturity and, hence, marbling might be of greater importance in the case of more mature animals. Yet, these carcasses were from the range that is representative of the great bulk of our block beef supply in this country.

These results suggest two general conclusions:

1) Much beef from the Good and Choice grades is very similar in eating characteristics. For example, high Good is almost identical with low Choice. Much average Good grade beef is as acceptable as average Choice, but the risk of obtaining unacceptable loins increases. Consumers' desire for leanness can be met with leaner carcasses with highly acceptable eating performance. Some of you have noted that some supermarkets have shifted from the equivalent of Choice to Good grade in their purchasing specifications.

2) The problem of less acceptable beef is one associated with variability within each quality grouping. Improved techniques of identifying could reduce the risk of less acceptable loins, but these remain to be developed. Enzymatic tenderization and other tenderization techniques may be the best hope for reducing this risk of quality differences.

IMPLICATIONS: The implications for the beef industry indicated from this and other studies are as follows:

1) While the overwhelming proportion of beef from the full range of Good grade through Choice grade is highly acceptable, the matter of variability is a serious merchandising problem. It is probably true that beef cattle have achieved in recent years, as compared to 30 years ago, a uniformity in desired type that has reduced the differences between grades. In addition, the tendency for more uniform feeding practices has further reduced the average difference between grades.

2) It appears that a high finish on cattle is not the only criterion that assures eating acceptability. It is probable that genetic differences and age of the animals account for a large part of the differences in tenderness.

3) Grades, both public and private, seem to have a high relation to cost of producing excessive finish—the more finish, the higher the grade. Dr. Herrell DeGraff



DISCUSSION is "backed" by lots of information as packers converse in front of NP booth. Shown (l. to r.) are: E. Lee Newton, general manager of T & T Packing Co., Macon, Ga.; James A. Beavers, jr., Beavers Packing Co., Newman, Ga.; Carroll Cannoles, AML, and Lawton Mullis, who is sales manager of T & T Packing.

of Cornell University pointed out a year ago at the National Beef Conference that weight differences between Good and Choice and between Choice and Prime average roughly 100 lbs. Since there is no great difference in average ages, these weight differences represent primarily 100 lbs. more tallow from grade to grade. Consumers' increasing rejection of fat and the loss from fat trimming of cuts in the retail store will force a gradual decline in importance of finish.

VALUE DIFFERENTIATION: It is likely that continued application of improvement in feeding methods and improvement in breeding will reduce the variability in eating acceptance over a wide range of finish from what is now Good through Choice grades. As this occurs, the design and criteria for a new basis for determining the value differences among beef carcasses will have to be developed by the beef industry.

Research has shown that the retail yield of merchandisable cuts is significantly higher from leaner carcasses. Retailers also have cited data showing the cost advantages of leaner carcasses. If leaner carcasses continue to improve nationally relative to higher finished carcass in eating acceptance, then it would seem that consideration must be given to the importance of retail cutability and yield in value determination. I suspect that we shall find that increasing price discrimination against highly finished cattle will force a reassessment of the basis of value differentiation within the next five to 10 years.

Probably the most important inference that can be drawn from this and other studies is that a new basis for value determination will be forced upon the industry. Leaner beef from better bred and more uniformly standardized fed cattle, marketed at more uniform ages, will likely become the mass supermarket types of beef of the future. Connoisseurs will likely continue to prefer highly finished beef, but the millions of beef consumers in this country will be well satisfied with a much leaner carcass. This redirection in market demand should not disturb us. We have the breeding and production know-how to begin to exploit this market. All segments of the beef industry must join hands in realizing the full potential that awaits development in the expanded outlets for beef.



RENEWING acquaintances is highlight of any convention. Shown here between sessions are (l. to r.): Joe Bentley of Basic Food Materials, Inc., Vermillion, O.; Gordon Potts, The Lindner Packing Co., Denver, Colo.; Joe Pollock, Basic Food Materials, and A. D. Curtis, president of Pueblo Packing Co., Pueblo, Colo. Representatives of the Basic Food organization reported their "lederhosen" (leather pants) were dashing but hot.



Oscar Mayer Research Shows that Livestock Can Be Bought in Closer Relation to Value

Economist Patrick J. Luby believes value buying can help individual firms, but is no panacea in improving profits.

GETTING your livestock dollar's worth is a difficult thing to do in the meat industry. At least it appears to be, from an analysis of return on investment in this industry compared with others. Why is it difficult? Can anything be done about it?

It is difficult for at least two broad reasons: (1) The industry is made up of many firms which most of the time are competing for a supply of livestock which is less than that required for the industry to operate at an efficient level; and (2) From a technical standpoint, it is difficult to estimate accurately the value of livestock offered for sale.

The first situation arises from the fact that practically all livestock production is in the hands of another type of enterprise—the farmer. These producers, reacting to livestock and grain prices, labor and climatic limitations, respond in a manner which usually causes severe cyclical and seasonal marketings. Aided by extremely easy entry into packing, there is a tendency for our industry to expand its capacity in the high production phases of these cycles. The result is that most of the time the packing industry has a demand for livestock which far exceeds the supply offered for sale.

The second reason, i.e., the difficulty in estimating value of livestock, arises from the fact that in the present state of the arts and sciences, practically all livestock are purchased on a live basis. This means that the parts of the animal which contribute most to its total value are obscured under hair or bristle, hide or skin, and fat. The fact that much livestock is produced and leaves the farmers' hands many miles from where it is slaughtered, and often is handled by one or more marketing institutions in between, makes it desirable for

many farmers to complete the trade at the first point of sale and on a live basis. Also, the expense of producer identification through slaughter, coupled with the fact that many shipments are relatively small, make pricing on any but a live basis somewhat more expensive.

BUY OR LOSE: The evaluation of livestock is further complicated by union labor contracts in many plants, which guarantee a minimum wage per day or per week to labor. This means that at any particular time and place livestock has value, not only because of its physical structure and yield in meat and other products, but also because lacking livestock to slaughter will cost the firm the equivalent of + cents per cwt. Therefore, the firm can at that time afford to bid up to + cents per cwt. more than the animal is worth in terms of meat and other products to avoid guaranteed payments.

This paper will largely avoid the very important economic-structure issue which leads to relative over-capacity and low earnings. It will avoid the selling side of meats and livestock, although it is realized that good selling is a "must" if we are to get our livestock dollar's worth. It will concentrate more on the firm's technical ability to determine at any particular point in time how many dollars' worth are in the livestock because of its physical makeup and how to try to get this value. If this could be accomplished, a more equitable distribution of the meat dollar would be made to farmers.

This requires an attack by the firm on at least two points. One is to establish a system to train buyers to be able to estimate accurately differences in value among animals. The second is to establish a system of checking the value which a firm and its buyers think they purchased against what they actually bought. This takes the form of identifying purchases through slaughter or through the cut, and comparing the cost of the livestock with its value as meat and other products. This should be done for each plant each day, and for each buyer's purchases daily or regularly on a sample basis.

To aid in this technical evaluation of live and carcass hogs, with the thought of further training buyers and graders or evaluators, a cooperative research project was undertaken a year ago with the USDA and University of Wisconsin. It is the progress of this research which concerns us in this paper today.

Our objective in this part of the research is to examine carefully the characteristics of all types of hogs which are offered for sale and to associate these characteristics with the value of the hogs. Why are hogs of different value? What is the makeup of the valuable hogs? What are the characteristics of those which are less valuable? These are some of the questions we asked about the animals.

The project was largely conceived by the U. S. Department of Agriculture and jointly planned and carried out through the cooperation of the USDA, the University of Wisconsin and Oscar Mayer & Co. All three institutions contributed considerable time, talent



LUNCH is served in Visking lounge as H. A. Lotka (left), sales manager for Visking Co., division of Union Carbide Corp., and G. L. Pitzer (center), president of Visking, have relaxing conversation with Hollis Rice of Florence Packing Co., who traveled from Florence, Ala.

and money, and all obtained the results for analysis. This report encompasses only the analysis by Oscar Mayer & Co.

The study consisted of a relatively large sample of hogs, of all degrees of leanness and fatness and of all weights from about 160 to 300 lbs. Each hog was identified, weighed and cut under controlled conditions. Every attempt was made to obtain as uniform cutting as possible. The carcasses were completely cut and each piece was weighed. The heads and leaf fat were segregated and weighed. Much other information on quality characteristics was taken on each cut.

Each hog was valued by applying the average green wholesale price for the last complete hog cycle (1956 through 1959) to each weight of cut. These values were applied against each of the major and minor cuts of the carcass and to the leaf lard. Estimates of the per-cwt. value of the heads and the rest of the non-carcass offal items were established by use of our company hog cutting tests for the four years. Thus, we established not only the value of the carcass, but also made a good estimate of the value of the non-carcass items. These values were summed to give a total value for each hog. This was divided by the live weight to obtain a value per live cwt. for each animal. This value was compared with more than 50 different factors, to find how the value of hogs varies with changes in other factors, such as weight, backfat thickness and dressing percentage of the animals.

SOME FAMILIAR FINDINGS: Many of the well-known relationships were confirmed. For example, as hogs increased in live weight, they were less valuable per cwt. The decrease in the proportion of lean cuts as hogs became heavier in weight more than offset increases in carcass yield.

It was established that if three characteristics of the hog are known, the value per cwt. can be very closely approximated. These characteristics are, in order of importance:

- 1) Measure of the lean-fat makeup of the carcass;
- 2) The live weight; and
- 3) The dressing percentage (carcass yield).

The most important factor, a measure of the lean-fat makeup of the carcass, traditionally has been expressed by the percentage of the carcass weight which is in the weight of the four lean cuts. This measure is closely correlated with government grade, back-fat thickness and body length. Relatively speaking, the percentage of four lean cuts of the carcass was nearly twice as important as live weight in association with the market value of the hog. The live weight was, in turn, nearly twice as important as carcass yield. However, all three are important, and it appeared to be impossible to obtain a close estimate of value without accurate knowledge of all three factors.

These facts lead me to believe that we have to view the live hog as being divided into three main parts, each of which is about a third of the total live weight. The first is the part consisting of the lean cuts—ham, loin, picnic and butt. These are the expensive cuts. Naturally, other things being equal, a hog having a high proportion of its live weight in these cuts has a relatively high value. The second part of the hog is the non-lean part of the carcass. This consists mainly of the belly, spareribs, fat and trimmings plus some miscellaneous cuts. While the average value of this part of the carcass is usually much below that of the lean cuts part, it is also much higher than the remaining third of the live hog—the non-carcass parts. This last part, the leaf fat and killing credits, is of relatively low value.

If a hog can be classified according to these three por-



TRIO of executives is caught by NP cameraman as they discuss convention activities. Pictured (left to right) are: B. J. Killian, executive vice president, Field Packing Co., Owensboro, Ky.; Floyd A. Segel, executive vice president of Wisconsin Packing Co., Milwaukee, and C. E. Field, who is president of the Owensboro concern. Packers await commencement of Friday afternoon session.

portions, a very good estimate of its value can be made. It can be expressed in several ways. One is an expression of the lean cuts as a percentage of the carcass and the carcass as a percentage of the live weight. For example, take a 200-lb. hog with 70 lbs. of lean cuts, 70 lbs. of non-lean cuts and 60 lbs. of non-carcass material. This hog has a 50 per cent lean cut yield (70 lbs. lean cuts out of a 140-lb. carcass) and a 70 per cent dressing percentage (140-lb. carcass out of 200-lbs. live weight). We can call this hog a 50-70 model, 50 per cent lean cuts of carcass and 70 per cent carcass of live.

Or we could consider the parts as portions of the same live animal. The hog has 35 per cent of live weight in lean cuts and another 35 per cent as non-lean cuts. In these terms, he is called a 35-35 hog. Our research showed that expressing only the lean cuts as a percentage of live weight is a good measure of value. However, expressing both the lean and non-lean cuts gives us a much better estimate of the actual value of the hog. For example, to use extreme cases, a 35-30 hog, i.e., one which has a 65 per cent dressing percentage, is of much different value than a 35-40 hog, i.e., one with a 75 per cent dressing yield, even though both hogs had a 35 per cent yield of lean cuts.

The research showed that on the average a one percentage point decrease in lean-cut yield can be made up by a little over two percentage points increase in non-lean cut yield without a decrease in value. For example, a 35-32 hog is about equal in value to a 34-34 hog, or even to a 32-39 hog.

The highest valued hogs have the highest yield. The study pointed up some findings which probably aren't as familiar to many of us:

1. Although hogs which are graded No. 1 under government specifications have, on the average, a lower carcass yield than the No. 3's, the hogs which actually have the highest market value have a higher carcass yield on the average than do those hogs which have the lowest market value. In other words, if hog grades were based on their average market value, the hogs in the top third value class would have a higher average dressing percentage than those in the bottom third by over two percentage points.

When the hogs were arrayed according to their actual average 1956-1959 market value per live cwt., and divided into thirds representing the same number in the

No. 1 value class as in the government graded No. 1 class and the same number in the No. 2 and No. 3 value classes as in the government graded No. 2 and No. 3 classes, respectively, some hogs grading No. 1 under government specifications fell out of the No. 1 class based on market value. Of course, some No. 2 and even a few No. 3 hogs rose into the No. 1 "market value" class. Usually, when hogs graded differently under the two systems, it was due to carcass yields. Some hogs with high dressing percentage rose into the top market value class from lower government grades, and others with low dressing percentages fell from No. 1 government grade to a lower class based on market value (see table below).

This does not mean that the leaner hogs yielded higher since they did not. What it does mean is that among the most valuable hogs are a group of the very lean animals and another group of those not so lean but possessing very high carcass yield.

While on the subject of dressing percentage or carcass yield, it is important to remember that it is not just a function of how much "fill" the animal possesses. If that were true, we would not have found statistically significant positive correlations between dressing per-

Average Composition of 200-219 Lb. Hogs, by Government Grade and by Average 1956-1959 Market Value, Cooperative Research Study, Madison, Wisconsin, 1959

Classification Based on Govt. Grade	"Lean" Cuts	"Non-Lean" Cuts	Dressing Pct.	Other	Total
1	35.1	34.6	69.7	30.3	100.0
2	31.6	37.3	68.9	31.1	100.0
3	30.8	40.0	70.8	29.2	100.0
Based on Ave. 1956-59 Market Value					
1	35.1	35.6	70.7	29.3	100.0
2	32.1	38.0	70.1	29.9	100.0
3	30.3	37.7	68.0	32.0	100.0

centage and weight; between dressing percentage and backfat thickness; and a negative correlation between dressing percentage and "per cent four lean cuts." Dressing percentage is an important individual characteristic of each animal just as is the lean-fat ratio in the carcass and the live weight.

It appears that according to average present pork and lard prices, that government grades, if used only with weight in a pricing system, would underestimate some hogs with a relatively high degree of finish (backfat) and high dressing percentage. Now, of course, grades can be set up to reflect today's market conditions and actually classify hogs because of their value on the market, or they can be set up for different reasons. For example, they can be set up in an attempt to move the hog-pork industry toward a leaner hog and leaner pork. It appears that this is the case with the government standards. Probably this is causing us, and will continue to cause us, some difficulty in our payment to producers. Should our industry pay for hogs based on what hogs are worth today or what they may be worth because of varying degrees of leanness 10 or more years from now? Should we pay more for some hogs which are not most valuable today, but which some day may be most valuable? Can we pay more for lean hogs which are not as valuable today, but which if produced in quantity may increase the demand for pork sometime in the future?

The percentage of ham is as good if not better than the percentage of lean cuts.

2. The weight of the ham as a percentage of carcass weight is as good an indicator of the value of the hog as the total weight of all four lean cuts as a percentage of carcass weight. Since the percentage of loin and per-



WEIGHT-GUESSING game at booth of Natural Casing Institute features giant-sized sausage for visitors to attempt guess at its weight. Fred Dressler (left) of Gardnerville, Nev., president of American National Cattle-men's Association, and C. K. Malone of Choteau, Mont., director of National Live Stock and Meat Board, give their "expert" opinions at Casing Institute's display.

centage of shoulder have a lower degree of association with actual market value than does the "per cent ham," their inclusion in an average of four lean cuts does not increase its value as a predictive factor.

This is significant since many packers are called upon to get the cut-out of the four lean cuts for evaluation stations, breed associations, fairs and universities, as well as for farmers and for training their own buyers and graders. If only the hams need to be identified, weighed and kept segregated, the cost of obtaining such data is substantially reduced.

It also appears from preliminary analysis that graders and buyers may be able to make a better estimate of the "per cent ham" than the "per cent lean cuts" of the carcass while the hog is alive. This needs further analysis and research, but it seems logical that a better estimate of the ham can be made since it is the "most visible" of the four lean cuts on the live animal.

One backfat measurement is as good as an average of three.

3. The last backfat measurement, over the last lumbar, is at least as good an indicator of value as the average of the usual three measurements. Again, the inclusion of two poorer estimates with a superior one does not make the average of all three any better, if as good, as the best one alone. This, too, in actual operations should save some time and expense.

ESTIMATING DOLLAR'S WORTH: In estimating market value of hogs, an equation, or system, utilizing live weight, per cent of hams (or lean cuts) of the carcass and dressing percentages proved to be excellent. If these three factors are known, the error in determining the value of an individual hog in practically all cases will be less than one-tenth of the error incurred if we assumed all hogs to have the same value per live cwt., that is, "a hog is a hog." In half the cases, the error will be reduced to less than 5 per cent of the error sustained by averaging all hogs.

This study and others previously published on the subject show that buyers can attain a relatively high degree of accuracy in estimating all three factors (per cent hams or lean cuts, live weight and carcass yields) in live hogs. Therefore, through proper training and supervision, a fairly good estimate of the hog's dollar worth can be estimated in live hogs.

Buying on a carcass basis correctly measures two of

the three important factors which can be used to predict value, a lean-fat carcass measurement, weight and dressing percentage. The errors due to variation in carcass dressing percentage and those due to the deviation of weight of individual hogs from the average for the lot (sorting error) are largely eliminated. However, the most important factor, the "per cent ham" (or "per cent lean cuts") must still be estimated, and this study showed that the accuracy of the graders in this regard was no higher when observing the carcass than it was when observing the live hog. Furthermore, there are added costs in estimating value on carcasses rather than live hogs. Some marketing institutions and many farmers have opposed it on various grounds so that its probable advantages from ability to estimate value better are at least partially offset by disadvantages of cost, delay in payment, lack of trust in packer grading and other disadvantages.

This is probably as far as present technology will allow the packing industry to go efficiently in evaluating hogs of any particular producer. However, it is very possible that the day will come when large producers will demand and be able to bargain for a very close approximation to value. This could be done by identifying and weighing the hams to get the actual "per cent ham" of the carcass as well as the dressing percentage and live weight. But to obtain all this precision costs money, and the added value of such precision is undoubtedly less than the cost of achieving it today.

WHAT EACH FIRM SHOULD DO: A study of the return to firms in our industry for their investment in the capital needed to transform livestock, labor and management into meat indicates that we have not been getting our dollar's worth from some if not all factors used in production. Since livestock is by far the largest single raw material factor used, it can probably be said that the industry has not been getting its livestock dollar's worth. If this is true, it is probably because management failed to properly see that buyers learned value in hogs and also failed to establish controls to see that value paid for was actually received. The industry will probably not get its livestock dollar's worth until both are done, that is, (1) until we actually know what value is in livestock and make sure our buyers are able to recognize it; and (2) until we more carefully control or check to make sure that we are actually getting the value which we think we are purchasing.

Each firm, no matter what its size, the kinds of markets it utilizes to obtain livestock or the number of buyers, should set up a program of buyer instruction which particularly suits its needs. Likewise, each firm should set up a program to check or evaluate each day's purchases, or, preferably each buyer's purchases, each day or, if it can be accomplished efficiently, the purchases from particular producers. It is possible that an efficient sampling system can be developed under which each buyer need not have to be checked each day. With the proper digestion of data obtained, management will be in a much better position to make decisions as to buyers, locations, types of markets and producers to procure hogs in a manner which will yield increased returns for dollars expended. With modern electronic scale and computing equipment, no firm or plant is too large to operate such a program successfully. No firm or plant is too small to utilize manual equipment to perform the same task.

There is no one system of checking or evaluating to be recommended. Under any system, each hog would have to be identified by day, buyer and location of purchase. It would involve weighing and evaluating hogs or carcasses and putting the information in a form so



PAUSING a moment to rest from convention activities and renew old acquaintances are (l. to r.): William Kling, president of Valley Pride Packing Co., Inc., Huntsville, Ala.; Cornelius C. Noble, president of Noble's Independent Meat Co., Madera, Cal., and H. B. Huntington, president of Scioto Provision Co., Newark, O. Executives await opening of Saturday afternoon session on topic of chemical additives and pesticide residues.

that the results could be used by management and buyers. It is most important that management takes an active part in utilizing the data. The mere gathering of it with no resultant policy action and no training of buyers represents a waste of funds.

WHY THE CONCERN? There are two groups mainly interested in this subject: (1) The individual packer, who should be very interested because a more effective evaluation and buying program should lead to a more profitable operation; and (2) The farmers (often through their spokesman, the government, colleges and farm organizations) and others who are interested in distribution of income based on value produced and marketed. Both of these groups are interested in encouraging the production of higher quality and more valuable animals in order to increase the consumption of pork.

The reasons for interest on the part of both groups are good ones. Little needs to be said about why individual packing firms should be interested in knowing what each purchase of hogs is worth. Since something like two-thirds to three-fourths of all expenses incurred in producing meat products lies in the cost of the livestock, small errors in estimating value are relatively important. Animals are really raw material—raw material of varying value upon which our livestock buyers (really raw material purchasing agents) must be able to make a good estimate of value. The buyers who are best able to estimate value, with bargaining and other abilities equal, will know which animals to bid for and which to pass at any particular price. While it may be impossible to make every purchase profitable under every marketing condition, the buyer who knows values best will probably have purchases "in the black" a greater proportion of the time than will his less well-informed competitors.

Certainly the distribution of income based on value produced and marketed is a worthy goal. However, care must be taken that so much is not expended to get more equitable distribution of income that little total income is left to expend.

WILL LEANER HOGS RAISE CONSUMPTION? We often hear that higher payment for leaner hogs would increase the demand for pork and result in higher earnings to the industry and to firms therein. However, I think many of us sometimes become too

hopeful and are carried too far in this thinking. Will leaner hogs increase demand for pork? We are always told how strict government grading and a subsidy for the superior grade of hogs have caused Canadian hog producers to improve hog quality rapidly. Almost anyone who has compared the quality in the two countries attests to the superior leanness of Canadian hogs. However, the fact that one has a good product alone does not mean that he can sell it. Let us look at price and consumption figures in the two countries. The prices of hogs and pork have been closely related over the cycles during the last several decades in both countries. If we take the last four years before the depression and drought years of the 1930s, namely 1926 through 1929, and compare them with the last four years before direct government support of hog production in Canada, namely 1954 through 1957 (about one hog cycle), the consumption of pork per person dropped faster in Canada than in the United States. In the U. S., the drop was from 68.1 lbs. per capita to 63.9 lbs. per capita, a decline of 4.2 lbs. or 6.2 per cent. In Canada, the decline was from 56.1 lbs. per person to 47.6 lbs. per person, a decline of 8.5 lbs. or 15.1 per cent. During the same time (1926-29 to 1954-57), beef consumption per capita has increased by more than 50 per cent in the U. S. and more than one-third in Canada. Poultry consumption per capita nearly doubled in the U. S. and tripled in Canada.

Compared with almost any previous prewar or wartime period, pork consumption in the last few years has held up better in the United States than it has in Canada. However, factors such as increasing per capita real income and the consequent increasing demand for beef and other foods versus pork and the relatively poor image of pork have been overwhelming in this country. A good product alone does not insure sales. As people in our nation become wealthier, they apparently do not want as many potatoes and cereals and pork, no matter how high the quality of potatoes and cereal and pork. If people have a poor image of pork, they don't want as much pork, no matter how beneficial, attractive and tasty it is.

INCREASED DEMAND DOES NOT INSURE GREATER EARNINGS: Also, increased demand for a product such as pork does not insure that firms in the industry will be able to obtain a greater return on their investment. Many other factors are more important in connection with high earnings than the direction or trend in the total demand for the product. Factors such as ease of entry into the industry and the relative ability of firms to differentiate a product are much more important. In both meat packing and farming, resources can flow into the industry easily so as to increase the supply about as fast as the demand, and keep processing and production margins at a relatively low level. For over a decade now, the demand for beef has enjoyed a tremendous boom, while the demand for pork has lagged. However, from the data that I have seen, the earnings from packers' beef operations have not become considerably better and those from the pork operations have not deteriorated greatly. Beef producers' incomes have not soared through this cycle far above those of previous cycles and hog producers' incomes have not dropped much from past decades. While increasing demand may ease the pressure on margins and earnings a little bit, and while decreasing demand may slightly intensify the problem, resources in both packing and farming are mobile enough so that factors other than the trend in demand for the industry's product are far more important in determining earning rates.



GENERAL SESSION on Saturday afternoon featured seminar on chemical additives and residues. Before ascending podium, speakers relax and talk "shop" with C. F. Niven, jr., (second from right) of American Meat Institute Foundation. Shown (l. to r.) are: Aled P. Davies, AML vice president; Dr. Clarence H. Pals, director of Meat Inspection Division, U. S. Department of Agriculture; Dr. William J. Darby, professor of nutrition, department of medicine and biochemistry, Vanderbilt University; Niven, and Dr. D. M. Doty, AML director of scientific activities, who presided at the session.

BETTER BUYING WON'T SOLVE PROBLEMS: Good management of buying programs will not in itself make the meat industry one of relatively high returns. It is my belief that chronic low earnings in our industry are in very large part a function of the competitive structure of the industry and the product we are selling. There are many firms engaged in meat packing, not only in the country, but in every locality. It is very easy to enter the industry. It requires relatively little capital to be able to compete effectively in an area.

Widespread use of government grading gives a small, new firm an old established brand, and one that carries as much effectiveness in the market as if the firm had spent years and millions in developing its name.

Large differences in degree of unionization and, therefore, wage rates, and large differences in degree of government inspection help small local firms offset other advantages of scale and, therefore, increase the ease of entry into the industry. The fact that about three-fourths or more of the products sold are sold unbranded to the retailer means that the packer cannot influence the slope of the demand curve and, therefore, is fortunate ever to be able to "sell over the market price." Once this industry is able to package and brand fresh meats, a tremendous step will be taken toward more respectable earnings. The added fact that we produce a perishable product puts the seller at a disadvantage. The relative consolidation of buying power of retailers also works against a high earning rate. All of these factors help explain our earnings situation and won't be entirely, if even partially, overcome by even a perfect livestock buying program.

However, as in every competitive industry, individual firms can initiate changes which will yield very handsome returns. Usually, it is the competent innovators, those among the first with new tools, new methods or new management procedures who are able to hold competitive advantages in costs or in selling prices who are the successful operators. These are the firms that are or soon will be doing a better job of knowing value in livestock so they can get more dollar's worth of livestock for every livestock dollar expended.

Supply of Fed and Processing Beef to Rise in 1961; Pork Supply May Duplicate 1960's

AMI marketing chief J. Russell Ives notes that sausage output continues to increase; hides and fats depend on export market.



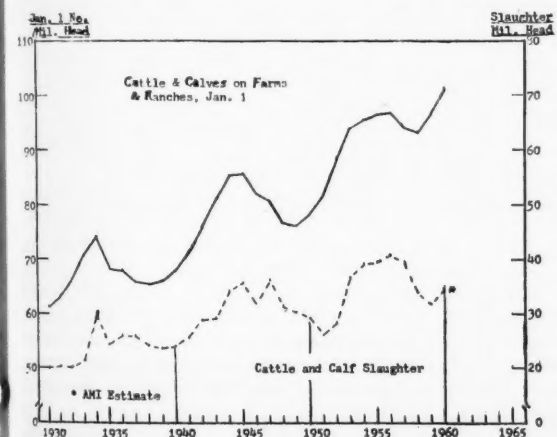
MY OBJECTIVE is to give you a thumbnail sketch of the livestock and meat supply situation. I'd like to start with the *cattle situation*. All of you are acquainted, I think, with the fact that cattle slaughter has been running above a year ago. To date, the over-run is about 10 per cent, with the increase being about the same percentage for steers, heifers, cows and bulls. However, calf slaughter continues low and is up only 3 per cent from last year.

You also probably are aware that the country's cattle herd has been increasing during the past two years. In fact, it was the holding back of breeding stock to increase herds that caused the cutback in slaughter supplies during 1958 and 1959.

The significant thing about the present situation is that in the short period of two years, and with a minimum of disruption to the nation's beef supply, we are now back to a near-record beef consumption per

When is the buildup in herds going to level off, or perhaps turn downward? I know of no one who has a really firm conviction on this point. The answer is both physical and economic.

The physical answer lies in grass and water conditions; both conditions have been largely favorable for the past two years. It is interesting to note, however, that

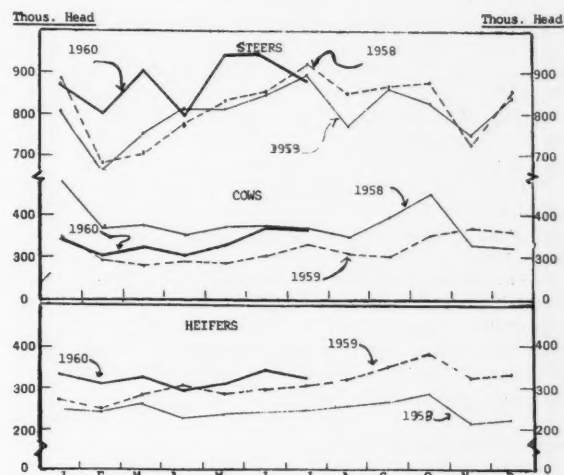


U. S. Cattle Numbers and Total Cattle-Calf Slaughter

person, with the herd buildup still continuing. As nearly as we can estimate, cattle numbers next January 1 will total about 105,000,000 head, which of course would be an all-time record.

This further increases beef-producing capacity and probably will raise next year's cattle slaughter close to the record number of 27,800,000 head recorded in 1956. However, calf slaughter is expected to continue well below the 1956 level, due in part to the increasing ratio of beef to dairy cows in the nation's herds. The effect of this is that we are producing more calves suitable for feeding rather than for sale as vealers.

WHEN THE DOWN-TURN? The question which concerns the cattle and beef industry at the moment is:



F. I. Slaughter of Steers, Cows and Heifers, 1958-60

cattle numbers in the 13 range states now are about 7 per cent higher than they were at the beginning of 1956, when continued dry weather forced considerable liquidation in most areas of the West.

As for the economic answer, prices for most kinds of cattle have slid off \$5 to \$10 per cwt. in the period covering the past 16 months.

Thus it would seem that the factors favoring a continued, rapid buildup in beef herds may have about run their course. The growth in population will support some increase in beef production, of course, but our beef producing capacity has now expanded close to the point which will provide more than 85½ lbs. of beef per person per year. This was the peak consumption rate reached in 1956.

HOGS: Now as to hogs, the outlook for the current (new) marketing year is for reduced slaughter compared with a year earlier during the July-December period. The reduction may be in the magnitude of 10- to 12 per cent. In the second half of the marketing year (January to June, 1961) marketings will decline seasonally, of course, but at a slower rate than a year earlier. A 3 or 4 per cent reduction from a year earlier for

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this six-month period seems a reasonable prediction.

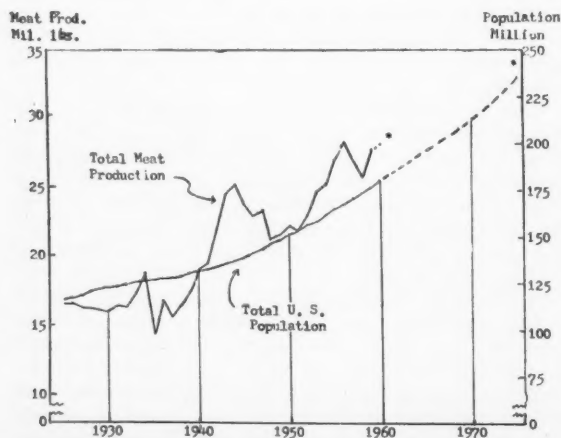
This appraisal of the supply outlook is based largely on the government's June pig crop report, which by itself does not give a very clear indication of hog marketings on a short-run basis. For instance, I'm sure that most of the pork industry is well aware that hog slaughter during recent weeks has been considerably larger than the reported 17 per cent cut in December-February farrowings normally would have indicated.

This is not to say that the government figures are all wrong. However, apropos of Dr. DeGraff's challenging discussion on budgeting, it seems to me that there are two alternatives in this situation—either we must learn how to make substantially better estimates of hog supplies, or we must learn how to operate the pork business on a basis flexible enough to withstand unexpected variations in supplies without jeopardizing our earning possibilities. As for the first solution, I might say that the USDA has undertaken a broad research project aimed at improving the accuracy of its livestock estimates. It will be several years before this program bears fruit. Nevertheless, it is obvious that accurate supply forecasts would help materially in the matter of meat company budgeting; this would justify increased effort on the supply forecasting job.

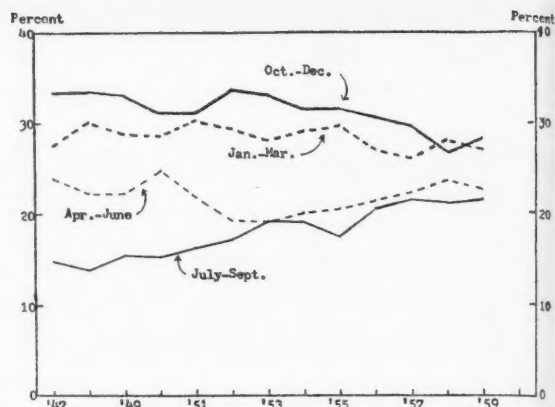
BREEDING: We are now well into the breeding season for the 1961 spring pig crop. Hog prices have shown more strength than last year, and the hog corn price ratio also is more favorable. How much of an upturn in hog production will result remains to be seen. At this early stage, a pig crop about like that of 1958 would seem to be a fair guess.

I have two subsidiary points on hogs which seem worth noting. The trend toward less seasonal variations in hog supplies continues. In only 10 years these variations have narrowed as follows: The October-December slaughter of barrows and gilts has declined from 33 to 28 per cent of the yearly total, while the July-September quarter has increased from 16 to 22 per cent. While some seasonal fluctuations in hog production no doubt always will be with us, considerable progress in multiple farrowing obviously has been made. The next 10 years will, I'm sure, see even more progress in this direction.

The second point is that hog production has not moved out of the Corn Belt in recent years, as some predicted it would do. While there have been some shifts in the production of hogs outside the main corn-producing area, the five main corn-raising states still account for over half of the pig crop. As a matter of fact,



TOTAL U. S. Meat Production vs. Population, 1930-70



SEASONAL pattern of Hog Slaughter changing. Federally Inspected Hog Slaughter, Per Cent of Marketing Year Total, covering the period between 1947-59

the 1959 pig crop in these states represented over 54 per cent of the U.S. total, compared with 46 per cent 20 years ago.

LAMB: In the lamb picture it's interesting to note that there has been a small but gradual recovery in the size of the country's sheep flock during the past 10 years. Since 1949 the U.S. lamb crop has expanded from 18,000,000 to 21,000,000 head. About two-thirds of the gain in this crop has been experienced in the western half of the country.

OVERALL: Converted to total meat supplies, it appears that in 1961 we can expect a further increase in beef in the form of more fed cattle and more processing beef. The total pork supply may not differ greatly from that of 1960, but marketings will be a little smaller than this year in the first six months and a little greater in the July-December half. Veal and lamb production may also be a bit larger in 1961 than in the current year. All told, combined production of meat could total as much as 29,000,000,000 lbs., compared with this year's 28,000,000,000 lbs., with the gain practically all in beef. Beef imports are not likely to be as large as they have been, however. The net result is that per capita supplies of all meat will continue at or slightly above the 160 lbs. per person average of the past five years.

Some additional points are these:

Sausage production has risen along with the population during the past two decades. Leaving out hamburger and other ground meats produced at retail stores, and adding an estimate for non-federally inspected production, it appears that U.S. sausage output in 1959 totaled well over 3,000,000,000 lbs., or 40 per cent more than in 1949 and 190 per cent more than in 1939. This total commercial production was equivalent to about 19 lbs. per person. Thus far in 1960, federally inspected sausage production has been running about 4 per cent over a year earlier, with wieners and franks outpacing other items.

U. S. production of canned meats has continued to climb during the past 10 years. The 1959 production was 60 per cent above 1949. Compared with population, the rate of gain has leveled off somewhat since 1956 and domestic consumption has remained fairly steady at around 10½ lbs. per person during the past three years. Production in 1960 is running about 4 per cent ahead of last year, with canned hams showing the greatest single increase in production.

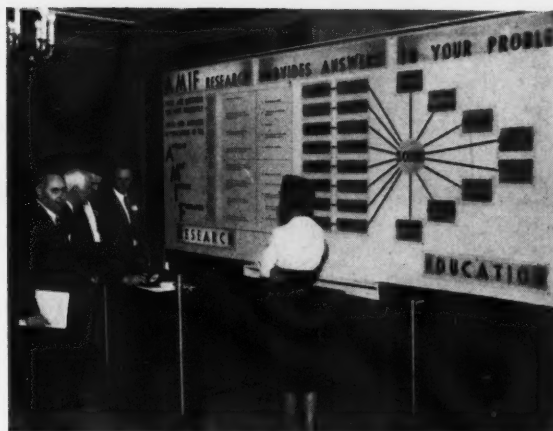
Production of sliced bacon has practically tripled in the past 20 years. The upward trend has varied some-

what with the cyclical swings in the pig crop. Since the great bulk of our bacon is now sold in sliced form, further gains in the production of sliced bacon will depend largely on the number of pigs raised and slaughtered each year.

Lard consumption, as lard, has declined steadily during the past 20 years. Were it not for a substantial export market and the growing use of lard as a raw material for the manufacture of other shortenings, domestic supplies would certainly be burdensome. During 1959, Cuba and the United Kingdom were by far the largest export markets for U. S. lard. Considering the present upheaval in Cuba, one can't help wondering how long this market will be available to us.

Despite the reduced use of tallow and grease in domestic soap, production of this by-product of the livestock industry has tripled during the past 20 years. In 1959 exports and industrial uses (including use in animal and poultry feeds) amounted to nearly 80 per cent of total U.S. production.

Hides are another by-product which in recent years have been highly dependent upon export markets. In the past five years, our cattle hide exports have averaged about 5,000,000 pieces annually, which represents



KNOWLEDGE test is given conventioners by member of American Meat Institute Foundation at AMIF question and answer board in lobby. Test had eight scientific multiple choice questions. Participant's right or wrong score was spotlighted and classified on the board.



IN BEGINNING (above) veteran exposition manager Jack Milton (center, facing camera) of the American Meat Institute does everything except run a lift truck in getting the exhibit hall set up for the opening. AT THE END (below) speaks for itself as the exhibitors pack up to go home or on to another convention. Final day for exhibits was September 19 although meeting lasted for another day.



THE NATIONAL PROVISIONER, OCTOBER 1, 1960



MEMBERS of American Meat Institute's engineering and experimentation committee gather for buffet-style luncheon in one of Palmer House private dining rooms.

roughly one-fifth of the total takeoff on this product.

A final point relates to the domestic demand for meat. From the government figures comparing consumer income with expenditures for meat, one can conclude that the demand for beef has strengthened during the past three years while the postwar downward drift in the demand for pork may have been arrested.

This changing complex of what consumers want and are willing to pay for is of vital concern to the entire livestock and meat industry. Dr. Kiehl reported yesterday on some interesting research his group has done relating to the demand for beef. The Institute currently has underway a study which should reveal some useful information on consumer attitudes toward ham. In the highly competitive markets of the 60's it would seem worthwhile for our industry to know as much as it can about meat's competition with the many other items fighting for a part of the consumer's pocketbook.

In conclusion, may I emphasize the point that both the livestock supply and the demand for meat are continually changing. We who look in the crystal ball have not found a formula for accurately evaluating all the many changes that are taking place. Nevertheless, I hope that this review of nearby prospects and long-time trends will be helpful to you all in management.

Tabulating Machinery Helps in Sausage Formulation if Fed Facts and Used Skillfully

Purdue expert James C. Snyder says machinery has shown it can get better answers more rapidly than does estimating.



IT has been my impression that some of you are disappointed in the contribution you have been able to make to those coveted and justifiable black figures in your own profit and loss statements. My comments concern the role that computers might play in preventing you from seeing red when you examine your company's earnings position.

Use of computers in solving business problems is one important phase of the current scientific revolution—a revolution in which the continued automation of industrial and military operations is taken for granted, and where the observation of such scientific phenomena as the Echo satellite really doesn't bring any goose pimples to most of us.

This morning, as we meet in conference, computers are being used in making the basic decision involved in breaking down crude oil into the various petroleum products; they are being used in the design of bridges and airplanes; they have built a comprehensive concordance of the Bible; they are being employed in the operation and control of many of our basic defense systems; they are being used in the determination of the level of finished goods inventory, and in the warehousing and distribution patterns of many of our leading companies. Thus, when we are talking about the use of computers for management decision-making, we are not talking about scholars' dreams or the computer salesmen's fairy tales (and I understand they have a few). We are talking about a very basic and a very important factor in American industry.

Computer formulation of sausage products is a relatively simple thing from the standpoint of mathematics. It is based on the algebra you studied in high school and essentially uses only three types of mathematical equations. Its use in the meat industry is not at all uncommon today; however, there are varying degrees

of effectiveness and of acceptance of the approach.

For discussion purposes this morning, we have developed a five-point program which we feel will be useful to you for implementation and evaluation of computer formulation in your business. As background to this discussion, however, I'd like to comment briefly on our experience in the area and the general philosophy that we have developed.

SOME USES: In considering the application of computers to management decision-making, we at Purdue do not believe it is a question of whether or not you will use a computer. Rather it is a question of how you will use computers, and how well you will use computers. We've been spending taxpayers' money for six to seven years now to find out. Here's why:

In areas other than the meat industry, we've been able to plan crop rotations for many of our farms here in the Midwest; we've helped fluid milk processors choose their best product lines; we've accomplished rather dramatic savings through use of the computer in the areas of ice cream, feed and fertilizer formulation, and we look forward to a continued program of computer application in numerous other areas within the agriculturally related industries.

Specifically within the meat industry, we've achieved savings of 3¢ to 4¢ per pound in the formulation of certain table-ready meat products without sacrifice of product quality; we've accomplished a 30 per cent reduction in the level of supplies inventory necessary for the efficient operation of a full-line meat packer; we've brought about reductions of as much as 20 per cent in transportation and warehouse bills without sacrifice of customer service; and we've forecasted hog slaughter up to six months in advance and had our forecasts come within about 3 per cent of actual slaughter.

Currently we're working on the development of a

BEEF committee of American Meat Institute has only smiles for Provisioner photographer as members pose before committee luncheon in Palmer House Crystal Room on Fri-

day afternoon. Luncheon for beef committee was one of numerous special meetings scheduled for AMI committees during organization's five-day convention in Chicago.



system that will help management determine the number of live hogs to be killed in any particular week by weight and by grade, the cut-out of carcasses arising from this kill, and the conversion of these primal cuts into processed product. As the program is now set up, management sends its Friday morning projections on product sales and hog receipts for the next week to the computer and gets an overall guide for the coming week. As deviations occur from these projections, the problem can be run through the computer again. At present this approach, too, promises to be a very useful tool for management decision making.

While we are generally optimistic about the effectiveness of the use of computers, unfortunately there have been misapplications of the approach and there has been overselling of the approach, and we would caution you on both these points.

GOOD DATA: On the point of misapplications of use of computers—and there have been some sour words

continues to be rather nebulous in spite of consumer taste panels and various methods of measuring the organoleptic characteristics of a product. I'm not here to define, to determine or to specify what product quality is or should be. I am here to say that when you use computer formulation you can specify the level of fat in the finished product; you can specify level of moisture (to four times protein plus 10 per cent); you can specify the amount of beef you might want for color, the amount of pork for tenderness, the amount of bull meat for binding and so forth.

What we're really saying is that the sausage supervisor can incorporate all the knowledge of sausage emulsions that he has built up through years into a computer approach for formulation. Thus computer formulation is not replacing his judgment or skill, it is merely giving him a tool that allows him to be more effective and more scientific.

On this matter of product quality, I'd like to express a

PROVISIONS committee members of AMI smile for camera before luncheon on Friday afternoon in private dining room of Palmer House. The committee has been working hard to rebuild the popularity of pork with the American consuming public.



here—it should be realized that the answers you get back from the computer are only as good as the data that are fed into the computer. If you're solving a problem on the computer, and you don't round up a group of people who can look at all sides of the question, and get the problem set up properly and get the right data into the machine, you're going to be in trouble. Most of the misapplications that occur are not the fault of the computer or the underlying mathematics it employs. It's simply that the people involved haven't told the machine what it needs to know to do a good job. We feel that this is an area in which university personnel and similar specialists are well qualified to give you professional advice, and we would suggest that you draw upon them rather freely in the implementation of a computer program.

With respect to the problem of over-selling, I don't believe we have any out-and-out fakes kicking around the circuit—but it is rather difficult to separate conscious deception from over-enthusiasm. Unwarranted promises have been made by various people, and when the party involved doesn't deliver, management has been left with a rather bitter taste in its mouth. About the best way to avoid this type of thing is to ask penetrating and definitive questions along the way. None of the computer approaches is so complicated that it can't be explained in the language of your business operations. Thus, it's basically your responsibility to keep a close check on a program as it develops.

SAUSAGE FORMULATION: Fundamental to the question to the use of computers in sausage formulation is the matter of product quality—a concept that con-

personal opinion, one that is largely subjective, and yet one that I believe is completely valid. In my opinion we have some sacred cows walking around in the quality area that have been very costly to the industry. Very frankly, I think they should be boned out and made into bologna because that's what they usually are in the first place.

They have crept in through two different ways. The first comes from what we will call the protective technicians—the people who are interested in protecting the public health and welfare, and have come up with such restrictions as the order in which we list ingredients on product labels, how we use food additives and various other requirements.

The second type of sacred cow sometimes comes from the practical technicians who have been responsible for the growth and development of many of our successful companies. Very often the sausage maker and his boss worked with various spices and raw material and came up with products that scored very high taste-wise and nutrition-wise. These products have been enthusiastically accepted by the public, and they represent a very important segment of the meat industry. The fact that the hot dog has become the all-American meat is perhaps symbolic of the ingenuity and creativity exercised by these men.

However, even here we have a few sacred cows walking around—cows that are costing the company money in terms of raw material costs, and cows that in some cases prevent the manufacture of products with as high a quality as desirable. My comments on computer formulation will center on the ways in which the person

making the final decisions on product formulae can use the computer to improve product quality and reduce product cost.

The basic approach of computer formulation is relatively simple, and we've outlined a five-point program that you can use for implementing such an approach in your own division manufacturing sausage, luncheon meats and similar products.

1. Raw Material Quality. Here you'll probably want a rundown on fat, proteins, moisture and any other indices of raw material characteristics that you can measure. All we do in computer formulation is to put in equations that control these factors. We'll have an equation that keeps a tally on total fat, another that keeps a tally on total moisture and so forth. To take a simple example, suppose we are making a product (z) from beef trimmings (x) and pork trimmings (y). If beef trimmings (x) and pork trimmings (y) contain 10 per cent and 50 per cent fat, respectively, and we want our product (z) to contain 40 per cent fat or less, we'll merely put in a mathematical statement that says $10 \text{ per cent } x + 50 \text{ per cent } y = 40 \text{ per cent } z$.

We all know that these characteristics vary a great deal, irrespective of whether you buy your raw materials on the open market or whether they're generated from your killing operations. Some packers have resigned themselves to the idea that raw materials are like women—completely changeable—and that there is nothing you can do about it. Others have instituted various forms of quality control and have modified this

quality for less money than the one produced prior to computer formulation. Of course, as you get into quality control of raw materials and more precise evaluation of their properties, you have greater opportunity for improving the quality of your particular product and for reducing its cost.

2. Raw Material Substitutability. This will vary with how rigidly you want to maintain finished product standards—taste, texture, color, etc.—and also with the particular type of product to be formulated. If you're making a No. 2 bologna you have more substitutability than if you're making pepperoni. The computer, however, doesn't really care about how much substitutability you have. This is an organoleptic problem rather than a mathematical one. The important thing is to tell the computer how much substitutability you will permit, and it will formulate your product within these specifications. For example, if you want a product (z) with at least 40 per cent but not over 60 per cent beef trimmings (x) we merely put in two mathematical statements that say $40 \text{ per cent } z \text{ and } x = 60 \text{ per cent } z$.

I suspect that a lot of the substitution ratios that are being used by the sausage industry today are rather personal and have never really been studied from a scientific standpoint. One of the benefits of computer formulation is that you find out about substitutions that you can make in the production of a quality product that might not have been apparent to you previously.

3. Raw Material Costs. These are basically straightforward calculations, although some people have occa-



MEMBERS of accounting committee of AMI pose for NP camera prior to luncheon in Palmer House private dining room Friday afternoon. An accounting session was held on Saturday, September 17. The proceedings of the meeting were not available for publication by the NP.

variation. If they're buying on the open market, they do a better job in setting and enforcing their specifications. If they're buying from their own pork division, they get a little closer to the men who are working up pork trimmings. In one way or another they institute more standardization. Irrespective of what they're getting in the way of raw materials, they attempt to improve the perceptiveness of the sausage maker when it comes to material quality. They may use simple laboratory tests or they may carry on experiments in which they employ density tests and simulation counters.

In any event, we know that even if you're not using computer formulation, you should have some measure of what you possess in raw materials if you want to make sausage. We've never encountered a situation yet in which the person making the final decisions on product formulae couldn't take the current method of measuring raw material characteristics and use the computer to come up with a product of equal or better

sionally gotten off base. To follow up with our example, if you're making a product out of beef trimmings (x) and pork trimmings (y) which cost 35¢ and 25¢ per pound, respectively, the mathematical statement would merely be: Minimum $35 + 25y$, subject to the restrictions of the statements we have mentioned in the paragraphs above.

We've always been interested in the way some packers compute their cost of raw material for sausage, particularly in those situations where the table-ready meats division has complete autonomy—or at least that's what we've been told. Supposedly, it can buy the available raw material generated from the pork and beef kill at "Yellow Sheet" prices or some variation thereof. Or, it can go on the open market if it can get a better deal or the pork or beef division doesn't have what it needs. However, the thing that disturbs us as we check through the records is that come hell or high water, every last pork cheek or some other item that was generated from

the killing operation gets into sausage products in one way or another. We're not sure what this means in terms of variation in product formulae, and even perhaps product production levels, to get the job done. We do know from our experience that this type of thing can be very costly. We would strongly recommend that when you set up for computer formulation you also provide for the disposal of raw materials you don't need for least-cost formulae, and you also provide for open-market purchase of the raw materials that you do need for least-cost formulae but which are not available from your killing operations. Formulation programs that have ignored this aspect of raw material availability are not completely accurate with respect to raw material costs.

4. Computer Analysis. A lot of people do a good job on the first three items only to get bogged down on this fourth one. I'm not sure who's to blame here. Usually there hasn't been any problem in telling the machine what you want in the way of level of fat, maximum pork, minimum beef and so forth. But there have been problems, or at least variations in the effectiveness of the sheer mechanics of machine calculations.

We've seen some rather awkward, time-consuming and expensive methods of solving simple problems. You'll find packers who are paying and waiting for 40 to 50 minutes of machine calculation when they should only be paying or waiting for 4 to 5 minutes of machine calculation. This is a tenfold error. If you have very many of these tenfold errors in your computer operations, the whole program is liable to fold. We'd strongly recommend that you check alternatives on this matter of the mechanics of computer calculations.

5. Program Operation. When it comes to the continued operation of the program, there doesn't seem to be any given organizational pattern that is universally applicable. Each operation needs to be tailored to the particular characteristics of the firm in which it is used. To date, there are about as many setups for computer formulation as there are companies using this approach. These programs may be quartered in the industrial engineer's office, the comptroller's office and almost every other place in the company.

It is important that you have a group of people who can keep a close tab on raw material quality, cost, substitutability and availability; people who can interpret

the technical and economic changes in these areas, and people who can decide how frequently a computer formulation should be run. In our experience, this varies from a day to a week, depending upon the amount of fluctuation in raw material prices, quality, etc.

However, the kingpin in this entire operation is still the man who makes the final decisions on product formulae. Unless he's convinced that it's worthwhile, a computer formulation program won't do too much good; the formulae are liable to end up in the waste basket.

What we've usually done here is to let this man sit down for four to five hours some night and have him come up with his least-cost formulae. Then we give the same quality specifications and problems to the machine that he has used and worked with and let the machine work for four to five minutes and then compare answers. To date the computers have always been ahead, and to date these men have always been convinced that this is an effective tool for increasing product quality and reducing product cost.

Two words of caution in closing: First, while the computer formulation can be neatly summarized in our five-point program, the initial implementation takes a great deal of spade work in the areas of data collection and organization, personnel coordination and particularly in the design of the mathematical system used by the computer. Depending on the approach that is taken, for example, you might need a system with up to 80 or 90 equations and several hundred variables. For this reason, we'd advise you to use the services of your university personnel or other specialists in the area to insure that your program is set up properly.

The second word of caution relates to the fact that computer formulation is a very sensitive procedure. If you're feeding poor data into the machine, you can get into trouble rather rapidly. It's all too easy to come up with a computer hot dog, for example, that falls apart when you put it on your customer's shelf—or if it doesn't fall apart, it lies down and goes to sleep.

We've been very much impressed, however, with ability of the industry to avoid these types of pitfalls. We firmly believe that if you can team up the computer with the skill and knowledge of the men who formulate sausage products, your company is going to do an unusually outstanding job in this area.

LADIES activities at AMI meeting included coffee "get-together" at Town & Country Terrace, lower level of Palmer House, on Saturday morning. Breakfast meats, sweet

rolls and coffee were served. Other activities included fashion show by famous designer on Monday afternoon in the Mayfair Room of the Sheraton-Blackstone Hotel.



How to Evaluate New Concepts in Sausage Industry to Get Maximum Value from Ideas



F. Warren Tauber, manager, food and packaging research division, Visking Company, division of Union Carbide Corp., describes new ideas for rapid processing of frankfurters.

THE sausage industry, like other large segments of the food industry, is looking for new ideas and new developments to attain a better position in the economy of our day. Speed seems to be the feature of the times and, in many ways, we are reminded of Lewis Carroll's "Alice in Wonderland," where Alice finds she must run faster and faster in order to stay put. As we see all the new equipment available, it seems that the sausage manufacturer must also run faster and faster in order to stay put. Most of us are not satisfied with remaining static but want to excel or be leaders in our field. New ideas are a means by which one may become a leader in the business.

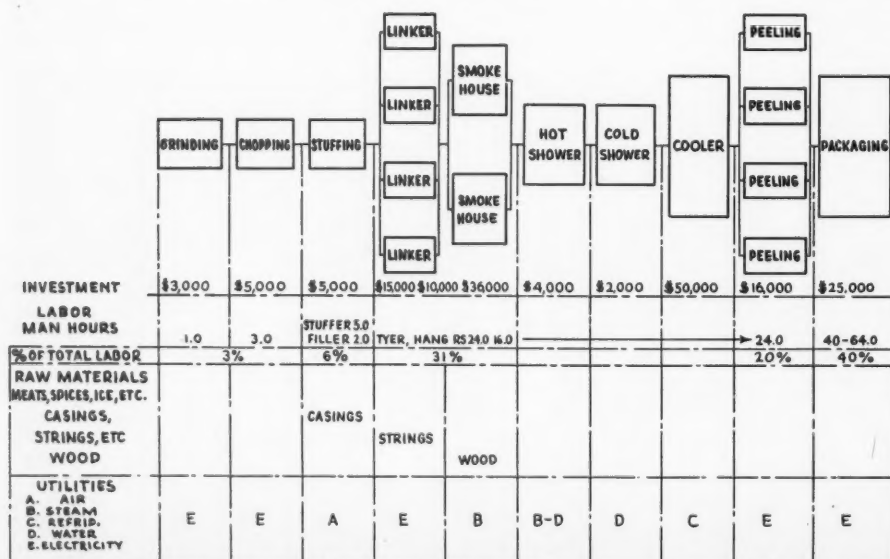
My discussion will suggest how to evaluate new ideas and new developments in the sausage industry so as to obtain maximum value from these new concepts. In evaluating these new developments, it is important to recognize that the fundamentals of sausage processing are basic ideas that are used in solving most of the problems in both science and industry, whether it be a new satellite, an atomic bomb or a frankfurter. In processing operations, these basic factors are time and temperature, size and shape. These factors, when imposed on a biological system obtained from muscle or animal tissues composed chiefly of moisture, protein, fat and small amounts of inorganic salts, result in a delectable food item, namely, sausage or frankfurters.

Obviously, all finished sausage must have color, flavor and texture acceptable to the trade and a composition that meets the local or federal regulations for sausage.

Each trade area is producing products of good consumer acceptance, and the sausage manufacturer is striving to hold his share of this business and expand his product acceptance to a larger consumer group. The sausage manufacturer in most areas is producing at top capacity and is looking for means of economically producing more product. Unfortunately, he cannot increase his productivity by the purchase of a single machine or device. Although this approach has considerable appeal, it usually results in a series of bottlenecks in his production line. As you well know, the operations are in a dynamic equilibrium, and any change in the operation must be considered in relation to the overall processing.

IDEAL OPERATION: Let us take a look at a most controversial subject in our system, namely, an ideal sausage operation. As you are all aware, the production of frankfurters from plant to plant is quite variable, and there is very little agreement as to what constitutes a good general sausage operation. As a result, to define better the area in which we propose to study, the following assumptions are made: 1) 10,000 lbs. of 10-to-the-pound frankfurters are to be made daily; 2) the equipment needed and the estimated investment are plotted, and 3) the total labor in man-hours and the distribution of man-hours for the various labor areas within the sausage operation are calculated.

Chart below summarizes this information in a schematic form. This summary indicates that the most fruitful areas for study are at the packaging, peeling, hanging on smokesticks and the general processing areas of



smokehouse and cooker. Grinding and chopping are well in advance of the other processing areas and collectively represent only 3 per cent of the labor involved in making 10,000 lbs. of frankfurters. We shall now present some of our findings related to stuffing, processing, peeling and packaging.

STUFFING: Stuffing requirements are two-pronged: 1) the rate of stuffing and 2) the uniformity of stuffing need to be considered when evaluating this process. Pumps of various types are being used quite success-

fully. It seems important to me that these pumps should have the same versatility as the conventional stuffer. For example, the pumps need to deliver 8,000 lbs. of frankfurter emulsion per hour on a free flow basis and approximately 30,000 lbs. of bologna emulsion in an hour. Pulsations and churning action of the pumps need to be at a minimum for resulting good quality products. Entrapped air should be at a minimum so little or no air pockets are formed in the finished frankfurter. The down time on frankfurter stuffing is approximately 50 per cent so 4,000 lbs. of frankfurters can be stuffed per hour. Bologna stuffing down time is approximately 65 per cent so that 10,000 lbs. of large bologna can be stuffed per hour using existing equipment.

The rate and uniformity of stuffing frankfurters in cellulosic casings have been helped considerably by the use of a mechanical sizing device. The sizer permits a rapid uniform flow of emulsion and markedly reduces the percentage of out-of-standard stuffing that occurs at times in a hand stuffing operation. A recent stuffer that delivers a predetermined volume of emulsion used in conjunction with the sizer should aid greatly in reducing the give-away in unit packaged frankfurters.

HEAT PROCESSING: Rapid processing of frankfurters in a fraction of the time normally required for smoking and cooking has been achieved in our laboratory. The information developed so far indicates that it should be possible to reduce the processing time greatly with some modifications of existing equipment. At the present time, we are attempting to define fully what is needed for rapid processing and what precise modifications may be needed if existing equipment is to be used.

BLAST COOLING: After smoking, cooking and showering, cellulosic encased frankfurters are chilled in a cooler and held for eight hours or usually overnight in a 40 to 45° F. cooler prior to peeling. Rapid chilling of the frankfurters would permit peeling, packaging and shipping all within the same day. With low temperature blast cooling, the frankfurters can be cooled rapidly. As to the temperature, it is important to establish it at that level which is associated with good peeling performance in your normal processing operations and then to establish the handling techniques with your new blast chill equipment. An example of how this may be achieved is as follows:

The internal temperature of a good peeling frankfurter was found to be 42 to 46° F. A nine-ton refrigerating unit cooled 1,500 lbs. of 10-to-the-pound frankfurters to the desired internal temperature in 15 minutes. Good spacing of the frankfurters within the cooler is important for obtaining a uniform rate of cooling. Peeling performances of 92 to 96 per cent were obtained. The blast chill process is an excellent example of how the fundamental concepts of time, temperature, size, shape and spatial patterns are used in solving problems in the sausage industry. I dwell on these well-established concepts perhaps much too much, but since they are so important, we all should know or re-acquaint ourselves with these basic ideas.

PEELING: The removal of the cellulosic casing from the finished frankfurter is very easily achieved mechanically when two fundamental requirements are met: 1) The formation of a smooth closed surface on the frankfurter, and 2) the proper moisture level in the casing so as to achieve release and tear characteristics.

Mechanical peeling is performed at the average rate of 500 lbs. of product per hour. We have found that on changing the transport speed of the vacuum-roller type peeler with a variable speed pulley, rates up to 725 lbs. per hour were possible. It seems as if the peeling speed for frankfurters is different for the various diameter

products. The change in the transport speed of the peeler makes this peeling machine an excellent tool for evaluating peeling performance of different casings and for assaying the effect of sausage formulation on peeling. One simply obtains the speed at which a control sample gives lower than normal peeling performance. The test sample is run at this speed and the performance recorded and compared with the control samples. For example, a test on an extender was checked as to what effect this additive might have on peelability. At normal speeds, the control sample gave 87 per cent peeling performance, whereas the test sample gave 86 per cent performance. At higher-than-normal speeds, the control sample gave 90 per cent and the test sample 35 per cent peelability. This seems to be an excellent means by which peeling performance can be checked and evaluated. Further research on this is being done.

PACKAGING: The packaging of 1-lb. unit frankfurters is a very high labor area in some plants. Packaging in many plants utilizes over 50 per cent of the total man-hours in producing frankfurters. Packaging machinery with considerable increase in productivity has been

ELEVATORS in Palmer House were kept busy loading and unloading AMI delegates. Traffic to and from the fourth, seventh, eighth and ninth floors was especially heavy with many packers visiting the hospitality rooms located on the upper levels.



developed. Since the packaging material, the encased product and the handling are in an equilibrium with the storage conditions, it is important that shelf-life studies be carried out when even seemingly minor changes in the product or process are made.

The package is your offering to the customer, and any failure of the package is immediately impressed on the consumer. To have good package performance, it is necessary that the formulation, processing, handling and sanitary precautions all be well controlled. Time and temperature of storage and shipping should be controlled so as to retard cycling of moisture and spoilage of the finished package at the retail store.

EVALUATING NEW IDEAS: We suggest the following procedure as a means of evaluating new ideas in your operation:

- 1) Establish what your existing system is doing.
- 2) Assess what the new idea or item will do in terms of increased production or cost savings.
- 3) Establish what effect the new idea or system will have on your product quality.
- 4) Assemble the facts and apply objective scientific principles and logic to help you in making a decision.

Sausage Progresses With Better Meat, Packaging, Cutting, Continuous Processes

Dr. W. M. Urbain, engineering research chief for Swift, reviews field and describes continuous frankfurt making.



Change is the by-word in sausage making today. Methods which have been conventional in the industry for many decades are now undergoing radical revision. These changes reflect adjustments to new conditions confronting the industry. For example, merchandising methods call for production of more sliced product which not only occasions new operations of slicing and packaging for the sausage maker, but also adds requirements for product stability which did not exist when slicing was a retail operation. Some changes are being induced by pressure to reduce the cost of manufacture. Other changes are the result of the general technological development of our era, which is making it possible to carry out procedures hitherto impossible. The net results of these changes are improvements in product quality and reduction in manufacturing costs.

The changes which are occurring can be described under various headings. We plan to discuss them under:

1. Raw materials.
2. Conventional process improvements.
3. Full process automation.

RAW MATERIAL: One might not expect to find any major change in this area, but in our opinion three are worthy of notice:

1. There is increasing awareness that the bacterial condition of the starting meat plays an important part in the quality of the finished sausage product, almost regardless of subsequent processing. Hence, factors which affect the bacterial content are receiving attention. Measures such as the use of lower temperatures, rapid handling and sanitizing of equipment, while not revolutionary, are being utilized intelligently, consistently and extensively. An overall improvement in the condition of the meats used in manufacturing sausage is being secured.

2. There is a tendency to move away from the conventional practice of formulating sausage by estimating the chemical composition of the starting meats by source, trim and appearance, and, instead, to use fast analytical procedures to determine fat, protein and moisture. Employment of such procedures requires the application of adequate sampling methods along with proper mixing of economical batch sizes. Present analytical methods, while sufficiently fast to have practical value, fall considerably short of the ideal of an instantaneous and continuous analysis, and this area is worthy of considerable research. The use of the information derived by analysis in a logical fashion in formulating sausage compositions through appropriate mathematical techniques is fairly well established in the industry and is resulting in more effective utilization of available raw materials and more uniform composition in the finished product.

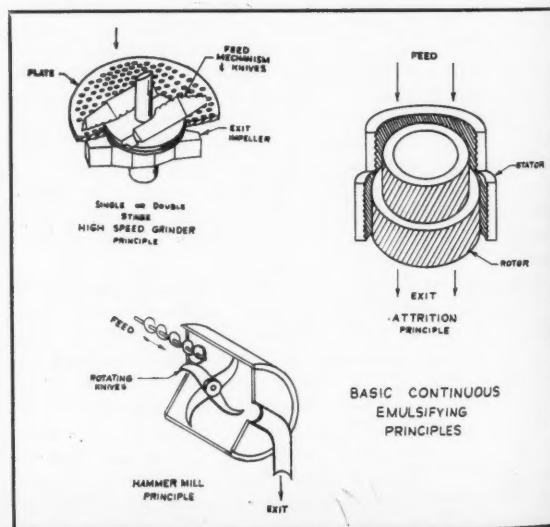
3. There is becoming available a new material for sausage manufacture. This is a protein concentrate derived from low temperature rendering of raw tissue

containing too little protein normally to be capable of economical separation by conventional trimming methods. Low temperature rendering accomplishes this separation economically and, at the same time, avoids denaturation of the protein, thereby making it suitable for many types of sausage manufacture.

CONVENTIONAL PROCESS IMPROVEMENTS:

Under this heading will be included processing innovations which, in reality, constitute changes within the framework of conventional methods of producing sausage. As the present sausage-making industry developed, it adapted ancient procedures for product manufacture to the requirements and capabilities that existed in its time. The basic methods, however, were changed only slightly. For example, electric power was used to drive grinders, choppers and other equipment, but the basic operations remained as they were. The artificial casing has replaced the natural casing, but the casing remains; batch processing is carried out today as in the past, except that the batches are larger. In recent times, such types of improvements have continued to come forth. Their value has been extremely significant in the success enjoyed by the industry. While it would be difficult to list all such improvements at this time, and while one must be arbitrary to a degree in any such listing, we may take note of the following:

1. There is some effort under way to develop a system for mechanizing the handling of starting sausage meat which will reduce handling costs. This operation is still in the developmental stage. Not only are there problems associated with the operations involved, but



THREE principles used in continuous meat emulsification.

volume requirements and the general complexity of a sausage kitchen operation with a diverse product mix impose some limitations on the utility of systems so far devised. However, as a step in this direction, there is some use of conveyORIZED weighing of ingredients, and it is probable that this area will develop as others which complement it come into existence.

2. There have been few basic changes in equipment and methods for the preliminary subdivision of the sausage ingredients. However, there have been some notable advances in the operations in which emulsions are prepared. A whole host of devices for chopping and emulsifying has become available, which appear to have accomplished the following results: a) improved emulsification with a reduced critical requirement for the exercise of judgment on the part of the operator; b) faster operation, and c) in some instances, the opportunity to emulsify on a continuous flow-through basis as opposed to batch operation.

Individual units available today emphasize particular features, and the sausage maker is able to select those best suited to his particular requirements. Units having the ability to handle meats on a single-pass basis open up opportunities for converting to continuous methods of production. Three basically different types of devices are recognizable in the single pass units: a) the high-speed, self-feeding grinder; b) the attrition mill, and c) the hammer mill.

Mixing is needed in some instances as a separate operation. Adaptation of standard devices, such as ribbon blenders and cylindrical mixers, has occurred.

3. Conventional processing entails a number of related steps. In the past when it has been necessary to transfer the ingredients and meats in process from location to location for these individual steps, this was usually accomplished with trucks or buckets. There is available today a selection of pumps which, without adversely affecting the meat or the emulsion, in most cases effect transfer. One might expect the availability of these means for transferring meats materially to affect kitchen layouts and generally serve to speed up processing operations.

4. Stuffing has received a great deal of attention and, in certain instances, some notable advances have been made. We see today the gradual replacement of air- and hydraulically-operated stuffers with pumps. These pumps provide a continuous feed of meat for stuffing.

They also appear to have the capabilities of increased capacity, providing more uniform stuffing and, associated with suitable equipment, providing for continuous vacuumization. Automatic devices for controlling the casing diameter (or back pressure) improve the uniformity of stuffing and make the operation less dependent upon the skill of the operator. Automatic linking equipment is in common use and, apart from the obvious labor savings, the equipment also improves the uniformity of link weight.

5. Curing remains largely the basic process that has always been used. However, better understanding of the curing reactions leading to good color has permitted finding ways to accelerate the process. Two specific measures should be listed here: a) use of ascorbic acid, or its derivatives, has promoted better color development, and b) the use of vacuum to eliminate oxygen and thereby to set up conditions for good color development in a shorter time. This latter measure also leads to better color stability for product which is to be sliced. The overall effect of present practices is to secure the needed color development of the product in a reliable manner.

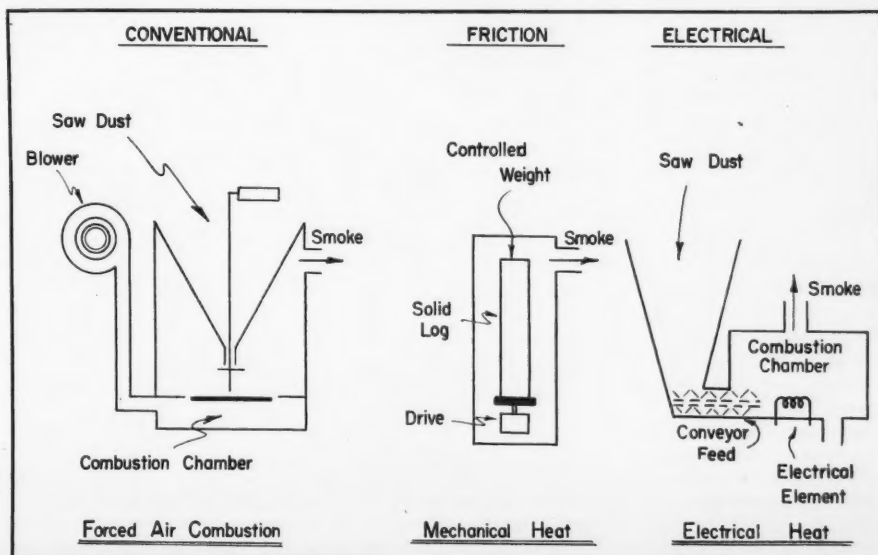
Opportunities for more rapid processing and continuous processing of certain products are developing through modern curing practices.

One improvement in curing for certain products has been the use of a starter culture. Some dry sausage products are dependent upon the growth of particular bacteria for the development of their characteristic flavor. Developed largely through the effort of the American Meat Institute Foundation, a culture has been made available which can be added to the starting meats to guarantee inoculation with a desirable species of bacteria and thereby improve flavor and quality.

6. Improvements in smoking procedures may be grouped under four headings: a) improved smoke generators, b) improved smokehouse design, c) possibilities of electrostatic deposition of smoke, and d) use of liquid smoke.

Smoke generator improvements involve better control of combustion with sawdust to obtain more uniform smoke output. Forced air and screw feeds for sawdust, with combustion induced and controlled by electric heating, constitute innovations for which particular advantages are claimed. A novel approach has been the use of a friction generator using solid wood as opposed

BASIC variations in modern smoke generating equipment are shown in the drawings at right. The material was used by Dr. W. M. Urbain of Swift in his talk on Saturday.



to sawdust. Some of these devices have yielded smoke with different characteristics. Smoke density controls have provided considerably more automatic operation of the generators.

Smokehouse design has been aimed at obtaining more uniform conditions within the house. This has entailed control of air movement and proper design of heat sources to avoid uneven temperatures. Humidity, likewise, has been provided with adequate controls. To a large degree, success in this area is the result of improved control devices which sense the variables and compensate automatically for changes. Efforts to deposit smoke electrostatically on sausage have been largely experimental, and are not in general use today, but they appear to offer the advantage of materially reducing the time that normally is required for smoking.

The use of synthetic liquid smoke as an ingredient appears to be in the laboratory stage at this time, but is worth watching.

7. Substantial reduction in the time required for chilling has been accomplished through the use of special units which will chill franks and similar products in about 10 minutes. The possibilities of continuous processing are reopened, as well as the ability to pack and ship the product in a shorter time and thereby reduce in-process inventory expense.

8. For products in artificial casings, which require removal of the casing, automatic peeling devices have become common and cut the labor involved in producing these sausage. Their use is associated with some critical conditions, such as temperature of the product, moisture of the casing and, in some degree, product formulation and processing procedures.

9. A whole host of improvements could be listed under packaging. For cured products, there has been general recognition that the best product stability is secured through vacuum packaging. This not only prevents color deterioration, but also discourages microbial growth and allows distribution periods beyond the

normal span without loss of product quality. Suitable packaging also fits in very well with display case merchandising of product. Many films and laminates have become available so that to a large degree the packaging materials can be selected in accordance with specific requirements. Shrinkable films allow for packages with neater appearance.

A variety of machines have been developed for wrapping the product; this operation has become one of the most highly mechanized in sausage making. Improvements in stuffing, linking, and processing franks and like products have made less difficult the preparation of exact weight packages. Weighing equipment (much of it automatic) allows for identifying collated product within exact weight tolerances and thereby avoids un-

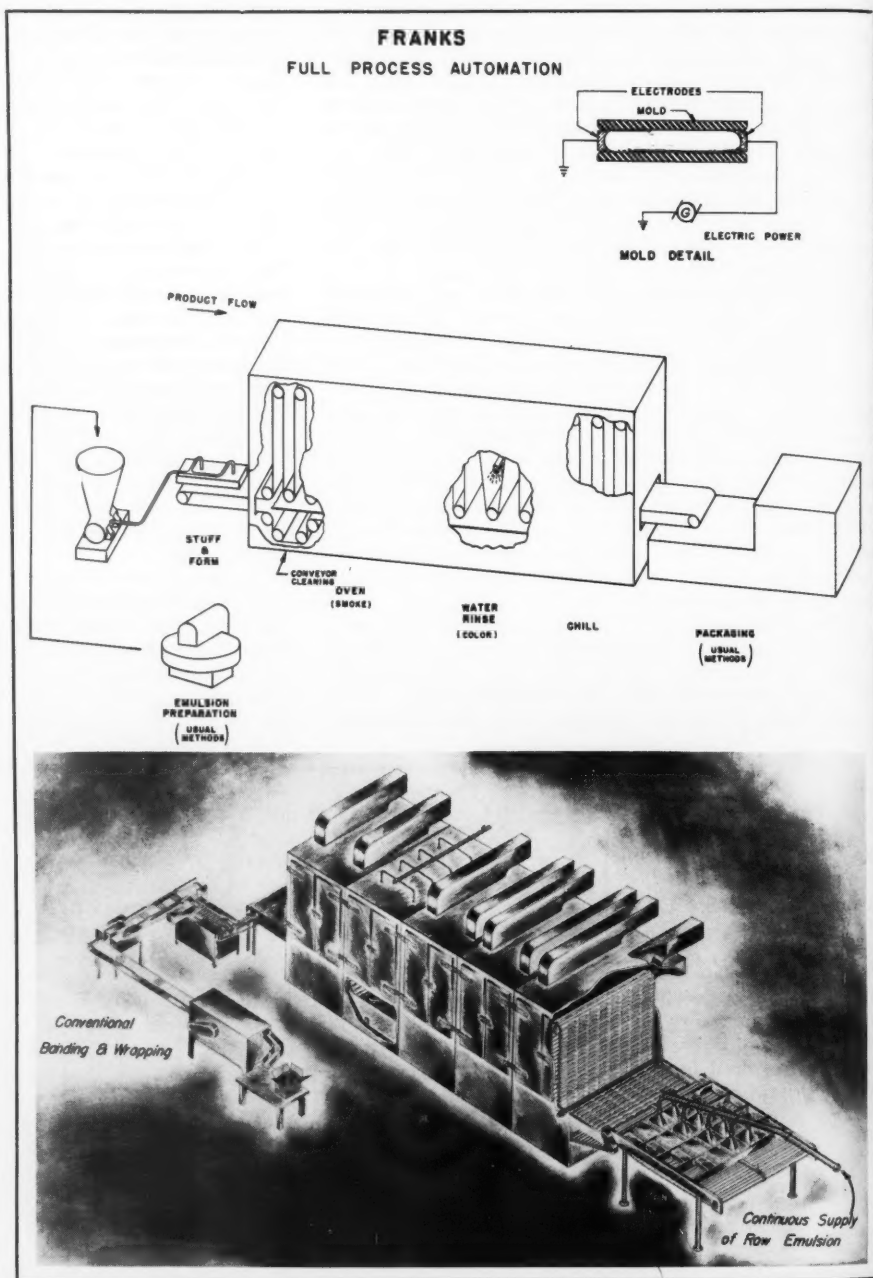


DIAGRAM (above) and schematic drawing depict a continuous frankfurter system.

necessary labor costs associated with this operation.

10. Sanitation is receiving attention in all phases of processing. Design of equipment takes into account cleaning requirements. New cleaning compounds incorporating special purpose agents, such as gluconates, complex phosphates, polyamino polycarboxylic acids, non-corrosive chlorine sources and sanitizing detergents, are available to make cleaning more effective. Ultrasonic cleaning may find application. One may project advances in sanitation to continuous operations where cleaning during processing will be built into the process itself.

Another aspect of sanitation now in limited use is the incorporation in the products themselves of agents such as the parahydroxy benzoates which are instrumental in reducing slime formation.

FULL PROCESS AUTOMATION: We have taken note of process improvements which we have considered to be within the framework of conventional processing methods. As manufacturers of sausage products, our basic objective is to turn out products in accordance with certain specifications and, within some limits, it is not important that a particular processing method be employed. As has been pointed out, the products and the methods, in general, have a history which goes back to antiquity. One might expect that the methods, therefore, reflect, to some degree, the capabilities of long distant periods. Modern technology offers new capabilities, and we might expect that entirely different processes could be developed for making the same products. We propose now to describe one which relates to the manufacture of frankfurts. The objectives which were established were as follows:

1. Starting with the meat emulsion, to produce franks by a continuous process.
2. To produce franks in a relatively short time period.
3. To use conventional ingredients.
4. To employ a range of formulations with these ingredients.
5. To produce a range of sizes and shapes.
6. To use smoke and artificial color, if desired.
7. To conform with conventional specifications for frankfurters.

The process that was developed may be described in the following way:

The emulsion, prepared in any suitable manner, is delivered to the machine under pressure. This pressure may be developed by a pump or conventional hydraulic stuffers. The emulsion flows into a manifold and is distributed to a series of molds. These molds are filled with emulsion on a fixed cycle of sequential operations. The body of each mold is made of an electrical non-conductor. The ends of the molds are metallic and constitute electrodes which contact the meat emulsion and form a complete electric circuit in which the meat emulsion forms a resistance component.

At the proper instant in the cycle, when the mold is full and the electrodes are in contact with the emulsion, electric current is made to flow through the emulsion and, because of its electric resistance, the emulsion heats. The process is controlled so that a final temperature, at this stage, of approximately 130° F. is attained. At this temperature, a portion of the emulsion protein coagulates and the emulsion changes from a fluid to a solid. The contents of the molds are then automatically ejected onto a conveyor. The 130° F. solidified emulsion holds the shape of the mold and is that of the frank. A conveyor carries the partially processed franks into a multisection oven where they are exposed to heated air, controlled humidity and smoke. The product remains in this oven section approxi-

mately 60 minutes. The exit temperature of the product from the oven is slightly above 160° F.

Following the oven processing, conveyors carry the product into a section where hot water is used to wash the product.

The next section involves the application of artificial color. This is done with a suitable spray. The last section of the unit into which the product is conveyed is the chill compartment and here air at approximately 35° F. is blown on the franks for about 20 minutes. The product temperature, as delivered from this section, is approximately 40° F.

The product at this stage is ready for packaging, which can be done by hand or automatic equipment.

We may list as follows the advantages to be gained by producing franks in the manner described:

1. Starting with the feed end of the equipment, there exists a balanced unit in terms of equipment components to effect forming, smoking, cooking and chilling with matched capacities.
2. A significant reduction in labor requirements is accomplished since the equipment functions automati-

REST break is taken by J. L. Crowley, senior vice president, The Cudahy Packing Co., Omaha, and T. J. Hickey, director of purchases at Cudahy, after Monday morning session in ballroom.



cally and continuously and eliminates many of the handling and holding steps of conventional operations.

3. The inherent characteristics of the operation involving the use of identical molds and suitable process controls lead to franks of uniform size and weight. This eliminates the need for weighing the product in preparing exact weight packages.

4. By appropriate design of molds and other components which can be conveniently interchanged, quick changeover to different sizes can be effected.

5. No casing is employed, which eliminates a significant cost item.

6. The entire system requires no contact of the product with human operators and there is no opportunity for product holdup. With suitable design, the conveyor system is self cleaning. These factors add up to virtual elimination of opportunity for contamination of product with bacteria.

The continuous process for manufacturing franks departs from conventional processing in a number of respects. The fact that the process is continuous and rapid not only accomplishes the savings advantages indicated above, but also fits in well with the requirements for a mass-produced item. It should be noted that some of the advantages accrue to the sausage maker in greater efficiency, and that others which relate to product quality, benefit the consumer.

As a conclusion to this paper, I would like to express a personal point of view: Anyone closely associated with the sausage industry gains the distinct feeling this industry is not standing still. It is extremely dynamic and is undergoing rapid advances which will help all livestock producers, sausage makers and consumers.

Silence Is 'Yellow,' Not Golden, in Politics

Since Job as Citizen Must Come First

U.S. Chamber of Commerce president Arthur H. (Red) Motley, president and publisher, Parade Publications, Inc., tells how Chamber's nonpartisan "how-to-do-it" courses can help.



I DON'T see any difference between the responsibility outlined by the previous speakers on this program for you businessmen to work harder and to do a better and a more intelligent job in your businesses and your responsibility in your primary role as American citizens, let alone leaders in your industries and in your communities.

You listen to a lot of great ideas about accounting, research, manufacturing, productivity and new equipment, and when you get through and go home next week nothing has happened—not one single, solitary thing—unless you go back to your towns and your companies and do something about it. Never mind whether the guy across the street does anything about it. Never mind whether everybody else thinks this is a new-fangled idea and it won't work because something like it was tried 10 years ago and it didn't work then.

I have talked to the American Meat Institute before on several occasions many years ago. When I started talking first to this group, this was a lousy business by the public admission of the people in it. Yet, we have seen new blood, new ideas, new dynamism, new products, new processes, new methods and new machinery in this industry that people a short 10 years ago didn't believe possible. This is true not merely with big companies but also with little companies. These things came to pass because an individual didn't believe that something had to be done in the same way that it had been done for years.

The last time I talked to this group was down at White Sulphur Springs at a winter meeting of the brass hats. I told them the first thing I would do would be to stop making a bum out of my industry by running ads bragging about the fact that I made only .7¢ per dollar of sales. I said if I was stupid enough to make only .7¢, I'd be damned if I would be stupid enough to advertise my stupidity to the world. I understand the public relations point-of-view; this Uriah Heap public weeping and public crying was supposed to elicit sympathy of the consuming public for this great industry that served in this great way at so little reward. All it did was to convince the brightest and the best of the younger guys that this was no industry to get involved with. How else except as new and fresh and exciting and thrilling challenges are given to young people in the meat packing business are you going to make this a great industry?

CHALLENGE OF POLITICS: Politics offers the same challenge, but your industry and every other industry I know anything about in America is ducking it because they have accepted the idea that politics is dirty; that politics is something to stay away from; that business should have no interest in politics except, of course, those lobbies in Washington, in state capitals, etc., and the less attention and the less thought you give to it, the better off you are. That is not so.

I don't suppose there is any area in our economy that

is a more glaring example of the ineptitude of government interference than agriculture. This is not said in any partisan sense because neither party has done anything except to louse up the whole agricultural picture and, as near as I can make out, those who would have us vote for them in this election haven't any other ideas except "Write a check."

We are a big country, the most powerful and the richest in the world, and don't let anybody deceive you. Compared to any other economy, free or totalitarian, on the basis of military or social or political or economic strength, we are supreme, and we are so regarded by most of the world. We are the envy of most of the world. We didn't get there by merely assuming that because we belong to a trade association and paid our dues, that is all we had to do. We didn't get there because we were a Republican or a Democrat and voted regularly in the elections and gave money to the party of our choice and, therefore, we were entitled to good, intelligent, honest government in city halls, in state capitals and in Washington. We got there because individuals—men and women—assumed the responsibility of citizenship.

The American Meat Institute didn't devise an artificial casing for sausage. That was done by an individual, through some pretty rugged days in the beginning and against the scoffing of most of the industry. He stuck with it and proved that it was right, to the point where an expert in your business, a scientist, said, "Of course, casings are synthetic." It's just as true that politics can be honest, politics can be sound, politics can be constructive even though it may take even longer than it took the guy at Visking Co. with the idea for an artificial casing. There were a lot of people whose own interests were involved but who were reluctant, apathetic and, therefore, resisted progress.

PRIMARY BUSINESS: Thoreau said years ago that when the public business ceases to be the primary business of the citizen, and when he would rather serve with his money than with his person, that state is not far from its fall. What I am saying applies not only to the American meat industry but to any other group of businessmen in any industry, including my own. No matter how bad things are, no matter how many people have failed and have gone out of business, no matter how many people in this business still believe they are not getting an adequate return on their investment, on their ingenuity, on their efforts, this is a good business, and so is mine. It provides an essential and important service to the American people, and over the years on the whole it has been providing it in better fashion than ever before. We are going to continue to do it, and we have to have better government in city halls and state capitals and in Washington.

Why is that? Our industries have grown bigger. Our industrial economy has become more complex. Today it is huge compared to what it was 20 years ago, let alone

50. We have grown bigger, and as we have grown bigger so has government grown bigger. We are both going to continue to grow. I am not alarmed at the size of business; I am merely alarmed at how good business is. I am not alarmed about the size of government; I am merely alarmed about how good the government is. Am I getting my money's worth, whether as a consumer of your products or the beneficiary of a free and democratic government, local, state or national?

We spend an increasing amount of time in selecting people to run our businesses, weighing them carefully, and we have rejected the idea that the oldest guy gets the job. This came lately to business, in many instances too late. However, it came and successful business in every line today is the business that has faced up to the problem of passing over the oldest guy and putting the best guy in the job. When we select the members for our boards of directors, we look them over carefully; we look at their background, their experience. We want them to look and act intelligent and honest. We want them to make a constructive contribution to the affairs of management of our companies or they don't get on the board of directors.

LESSON FORGOTTEN: However, when it comes to selecting the senior members of our board, we forget all that we have learned. The senior members of our board are the men in the city hall, the men in the state who write the laws that either hurt or harm all segments of our economy. They are the people elected to office who pass the laws and, in addition, appoint those to the regulatory bodies that administer the laws. Therefore, isn't it a little stupid that we spent no time in sharing in the process by which people are elected?

There isn't a handful of men in this room who could honestly say that they have ever really participated, personally, in the selection and nomination of the people who sit in the city hall and their state capitol or represent them in Washington. This is the process that begins where you live, in the precinct in which you vote. Sure, everyone gets excited every four years when there is a presidential election. Everyone organizes a Citizens Committee for Nixon, Kennedy or whoever is running at the time.

At the risk of being misunderstood, I say the presidential election is not as important as who sits in city hall, who sits in the state legislature, who sits in the Congress of the United States. Men who sit in those jobs are men who were selected first to be a county commissioner, a local district attorney, etc.; then five, 10 or 15 years later we find them in bigger public offices. If they were wrong in the beginning, they are not much better, even though the pay and the job are better in the later years.

This is true in our business. That is why we are spending more time screening even junior salesmen and other young men in our offices and laboratories. We are looking for good, sound guys with potential growth who some day may be in an important and powerful position, and we want to be sure that they are good, sound, intelligent and united and constructive—that they are going to perform for our companies.

UP TO YOU: This is no fancy parallel. This is real. Therefore, I want to talk to you about how you get good men in public office because there can be no argument about the importance of our doing it. You don't leave this up to the Chamber of Commerce. You don't leave this up to anyone but you.

Sputnik went up three years ago. I never witnessed such an exhibition of cowardice on the part of the nation that is the most powerful in the world as I saw in this country at that time. I was not disturbed because

two weeks earlier I had been briefed in Washington, off-the-record, as to what was coming; where we stood; why we were going in the direction of shorter-range missiles instead of the big, powerful rocket thrust. The outgrowth of Sputnik was that everyone began to criticize everyone else. This again represents chaotic thinking.

The worst object of our criticism was the schools. We still hear that the American school system is no good, the American educator is no good. However, this is not so. If there is anything wrong with the American educational system, it is the fault of you and me—citizens of the United States who have failed to exercise our duty and responsibility as citizens in the town where we live to make sure that the elementary and secondary schools and the colleges are the kind of institutions



WELL - KNOWN face at AML meeting is "Smoky," the hog. Frank Meyer (left), sales manager at Geo. H. Meyer Sons, Richmond, Va., and Harry Sparks, hog buyer from East St. Louis, Ill., evaluate "Smoky" for AML livestock judging contest.

that we want. I can name city after city where there is no school problem because somebody took the responsibility to be in a movement which resulted in an adequate supply of school rooms; adequate and well-compensated teachers. If this isn't true in your town, then it is your fault. People feel cheated and express the checkbook psychology: "We paid a lot of taxes and so we were supposed to get good education, good government, good everything."

DOESN'T WORK: Money has never worked that way. We have been paying a hell of a price for agriculture, without solving its problems. This fine segment of our economy is made up of fine people who have been deluded for years into believing that if they can get the government to spend enough money, then they are going to be all right.

I talked at Cheyenne, Wyo., in June, to the stock brokers association. I traveled two nights to get there, and paid my own expenses. It was worth it. I went as a tribute to a group of men who, in spite of all the blandishments of the government and the politicians and all the encouragement of the less lucid members of the group, have resisted the basic idea that government can do anything for them and that the government, over the long pull, is going to do everything for them and provide for them a climate in which their efforts, their intelligence, their activities will permit them

to succeed. This still is the greatest land of opportunity in the world in spite of the fact that every day people in my business go broke.

I was broke once myself and I do not intend to go broke again. However, I don't intend to let anyone else run my business or subsidize it. That is the reason why you will not see me down in Washington testifying in favor of postal rates that subsidize the publishing business. I am a maverick. A lot of people in my business don't like me, but I am not going to fall for that old junk that publishing news is a fundamentally important part of our lives and, therefore, the government should pay for part of its distribution costs with money coming out of the pockets of all of us. Except through faulty thinking on the part of those sitting on the various boards of directors, I can see no reason why we should fall into the trap of thinking that the government can do anything better for us than we can do for ourselves.

In 1956, I was a check book citizen myself. I gave money to the town, state and national committees for four years. I voted in every election and even sent in an absentee ballot when I couldn't get to the polls. I thought I was a good citizen. This was not so, however. I lived in an area where we did not have good men in government so a few of us decided to do something about this and we ran a candidate. We got licked by a vote of 3,000 to 950. Being a good salesman, I sat down and tried to figure out what we hadn't done. We had plenty of money and a good candidate, yet we had lost. I came to the conclusion that none of us knew how to do the job. We did not know how the town committeemen got their jobs. This started me thinking, along with a lot of other people, and it culminated in a program sponsored by the United States Chamber of Commerce for businessmen.

HOW-TO-DO-IT COURSE: The program is simple: How do you become effective in the precinct where you live? How do you run a precinct? How do you run a political campaign? This is not a lecture course; it is a discussion course. This is based on the theory that one of the reasons why people do not exercise their duty of citizenship is because they do not know how. If you don't know how to do something, no matter how much of an impassioned plea you hear with regard to it, then you do not do it. Therefore, we have presented this how-to-do-it course. We got the United States Chamber of Commerce to agree to make this a part of its program, year after year, and we put the course into the field in March, 1959. This is not a crash program, and it has no relationship whatever to the 1960 election. This is as much a part of the businessman's program as the effort you make to get your people to do a good job on the Community Chest drive, the Red Cross drive or the church drive. There isn't a businessman in this room worthy of the name who hasn't encouraged his people to participate in those activities, hasn't made it possible to take time off from the business to serve on committees, hasn't furnished stationery and stenographic help, telephone, etc. He is doing this to make the people working for him better citizens in the community in which his plant is located.

Businessmen are now in a position to say to people who man their plants, their offices, their wholesale houses: "You are citizens of the community and the country before you are employees of this company. We want good citizens working for this company, and we are going to make it possible for you to be better citizens purely on a voluntary basis. We are going to offer you an opportunity to learn how to be effective as a citizen in the community in which you live and



REGISTRATION area provided convenient place for conventioners to pause and chat with friends before or after sessions in Grand Ballroom of the Palmer House.

in connection with the party of your choice."

No fooling, this is not partisan. This has been endorsed by both parties and also by the AFL-CIO in the most obvious way possible—by a check for several hundred thousand of these courses.

In 1959 a man named Ed Jackson came to Washington from Shreveport, La. We discussed the program. He had only been in the field a month; he was a Democrat. He was not the richest guy in Shreveport and not the most powerful guy, but he got religion. That is all that it took, one dedicated man. He went back and used the mechanism already in existence in Shreveport. He did not do a stupid thing like going out and forming another committee to save the Constitution or free enterprise or democracy or the American way of life or freedom in Louisiana. He used what he had. Before he got through, he had sold 300 other individuals on the idea. He extended this to Baton Rouge, Lake Charles and New Orleans as well as other Louisiana communities.

TIDE TURNS: Six months later, what happened? In the fall of 1959, the Longs had a defeat for the first time in 30 years. These people had been making a mockery of democracy in Louisiana, and the latest and the looniest of all the Longs was spread over the front pages of all the papers. For the first time in 30 years, Ed Jackson and others like him, nameless—not big guys—went out and did the job and elected a conservative majority in the assembly. They elected a big enough number of conservatives so that the governor, no matter what his idea may be, can no longer walk on the floor of the legislature and either bludgeon or buy the kind of legislation that they have been passing in Louisiana for the past 30 years. Any businessman in that state knows the price he has paid for his apathy in electing that kind of men to sit on the senior board of directors of his company. Everyone of them is a Democrat, and what's wrong with that?

Beaumont is a one-party town. One banker, Fred Betz of the American National Bank, got the idea that even the Chamber was apathetic. He sold some others on this idea and, even though it was a highly industrialized area, they elected a complete slate of conservatives

to city hall this spring, every one of them a Democrat. Of course, let's not get the idea that the Democrats have a patent on all the political nuts in America; we have them in the Republican party, too, believe me.

I submit to you thinking people that had it not been for Sam Rayburn and Lyndon Johnson, we might have fared far worse in the recent unlamented 86th Congress. Part of the trouble in Mobile was people's attitude of "Why do anything about it? There isn't any opposition." I asked one man, "Do you have guys in office down there who are all good Democrats?" He said, "No," and I told him, "Well then, you can do something about it."

PUBLIC information committee of Institute goes on record for NP camera before being served at Friday noon luncheon. The committee has been active in many areas in recent years. It published the meat industry data book furnished to legislators and leading government officials.



At a recent dinner in St. Paul, the Minnesota Mining & Manufacturing Co. got sold on the idea that its employees were citizens of St. Paul and Minnesota and the United States before they were employees of 3-M. The company wanted good citizens, and the 3-M man saw clearly that he had not only a right but also an obligation to make it possible for the people employed by him in the plant, offices and research laboratories to know how to be good citizens. Therefore, he offered these courses and 200 or 300 people volunteered to take them. Before the first set of courses was under way, the United States Chamber of Commerce got an order from 3-M for 5,000 sets of these courses. More than 1,600 people already have been graduated from the courses up there.

ACTIVELY WORKING: Of the 450 persons graduated from these courses in the first three months, 75 per cent are actively working—not merely giving money, but ringing doorbells, babysitting, poll watching, making coffee and furnishing transportation. As a result, for the first time in 20 years, they unhorsed the Democratic Farmer-Labor party from St. Paul. There were no issues; there was no corruption; there was no scandal. However, the citizens did not like the way things were going and they did not buy all the guff that Hubert Humphrey and all these other people had been handing them for years. However, before taking the courses, they did not know what to do about it. They found out what to do, and they did it.

What do you have to have? You need dedication. Of course, you have to believe. I had a meeting with a lot of bankers in New York and I did not get anywhere. However, I then had a private meeting with the chairman of the board of Manufacturers Trust, and I finally made a sale—one guy. I told him that there were also a lot of other great banks in that town and that they should be in on this, and then I told him that I wanted him to get the heads of the banks together and let me

talk to them. Therefore, he wrote a letter to the heads of the 14 larger banks in New York and said in the letter: "If you can't come, don't send a boy." They were all there. Let's have done with this nonsense of delegating.

The next thing that you need is some guts. Even though you do deal in guts, among other items, you, as well as many other American men, are a little short on them. When we ran that campaign in 1956, I did not have any trouble getting money. People told me that it was a great idea and wished me luck, but a lot of them did say: "I am a banker with a lot of depositors, and

I cannot afford to lose any of them." "I am a lawyer; I have a good practice and I cannot afford to take a chance." "I am a retailer and I do business with everyone in town; I cannot afford to get involved."

If it hadn't been for the wives of these individuals, we would not have succeeded in getting our man on the primary ballot. The women have more guts in a minute than most men have in the political arena in an hour. Therefore, they went out and contacted the butcher, the baker, the candlestick maker and got 6,000 validated signatures, and our man thus got on the ballot.

STAND UP, BE COUNTED: When this course first hit, and even yet, a lot of guys around the country were saying that this was poison. One columnist said this in connection with retailers. However, I got a letter from a retailer, Will Morris of Silver Springs, Md., who runs a little department store. He said, "Don't let that guy kid you, he is crazy. This is a Republican community and twice I ran for mayor on the Democratic ticket. I was snowed under both times but my business has never been so good." In America we still admire a loser if he puts up a good fight. Besides, everyone in town gave to those two campaigns and, as a result, they knew about Will Morris and his place of business and what kind of business it was.

My wife, who was very concerned, talked to me at great length about becoming involved in something that was responsible for my being mentioned in an complimentary way directly in the local press. She did not understand why I would do it. I had to sit down with her and explain that my competitors, publicly or privately, have never spoken well of me. I had to explain to her that they have always knocked the hell out of my product and service.

One of the marks of a successful businessman is the ability to take it and come back for more. Don't let anyone kid you, when this program was started by the United States Chamber, a lot of people believed that it

was a partisan project—that it was anti-labor—which it wasn't at all. About three or four weeks after the program began, on instructions from the international union in Washington, a local union withdrew a \$2,000,000 deposit from one bank. This was kind of tough. However, the gentleman involved did not call upon the press and say that the public was against justice and that sort of thing. He merely let the news leak around and within a month or two that \$2,000,000 came back in new money, and much of it was also labor's money. You see, the labor men themselves do not like that kind of strong-arm tactics. They consider it un-American, whether the strong-arm tactics are employed by Jimmy Hoffa or by someone else.

Stand up and be counted. Sure, you are with the minority, but what of it? There is a place for business in

around the rest of the country. If you have the guts, then I think that you're not dismayed by what appears to be an inevitable trend to the welfare state, socialism or whatever they call it. This doesn't have to be, except as you and I miss the opportunity to teach our people on a voluntary, non-partisan basis, how to go about winning elections.

As I said, this is recommended not with the idea of influencing the election in 1960 but with the idea of insuring what people started in Philadelphia almost 200 years ago, something that is not going to fail. Remember, there were only 56 men who signed that document in Independence Hall, just 56 out of several million then living in the American colonies. However, 56 men were all that were needed. One of them achieved a certain measure of immortality by insisting on signing his



LUNCHEON for board of directors of AML is given in Crystal Room of Palmer House after Monday morning session. Board members represent small and large meat packing and processing companies from all parts of the United States.

the process of making sure that we have good government. All that we are doing is using a channel already in existence instead of running around and raising a lot of money to form new committees. You have an organization; you have an office; and you have a plan. Minnesota Mining was smart enough to offer this to both blue-collar and white-collar workers.

GIVE EMPLOYEES A CHANCE: The people who work in our plants are not screwy; they are not radical. Why should they be? They own a home. It may have a mortgage on it, but then they own it. They own an automobile or two. These may be second-hand cars, but they own them. Therefore, let's give them a chance to make their thinking articulate at the polls, whether in the South, the Southwest or the two-party system in the North.

In the process of selecting and nominating good people, let's not let happen what happened in Muncie, Ind., in 1958, when the voters elected a joker by the name of Harmon to Congress. The only thing he could think of doing was to rent his front porch to the government for \$100 a month and then to put his wife on the government payroll as a secretary for \$450 per month. The businessmen of Muncie denied any responsibility for Harmon being elected, but I have news for them. They elected Harmon because, as Edmund Burke said: "The only thing necessary for evil to triumph is for good men to do nothing."

There are some people who say: "Neither candidate is worth anything, so I'm not going to bother to vote." Why aren't they worth anything? It's because the businessmen of Muncie and other places did not do this job that I am talking about. Never mind what happens

name so big that even a casual glance at the document would have shown that John Hancock was for this thing. They were not worrying about who was going to lose a case, deposit or a sale. They knew that if the opposition prevailed, they were going to be hung by the neck until dead.

Personal participation is the essence of successful democracy. It can succeed in no other way and I don't care whether the president's name is Roosevelt, Truman, Nixon or Kennedy. As Ben Franklin left that hall in Philadelphia, a woman reportedly stopped him and asked: "Mr. Franklin, what have you given us?" He reportedly said: "Madam, we have given you freedom, if you can keep it."



LEAVING Grand Ballroom after Monday morning general session which featured report by The Raymond Loewy Corp., crowd moves through the registration area.

Scientific Determination Rather than Rigid Law Should Prevail in Additives Regulation

Dr. William J. Darby, chairman, food protection committee, National Research Council, pleads for realistic approach to protect consumers without banning necessary additives.



THE role of meat and animal products in the American diet can be appreciated from the recent statement by Hodgson (Food: The Yearbook of Agriculture, 1959) that "two-thirds of the protein consumed by Americans and two-fifths of their intake in calories come from animals." Indeed, in 1956, the red meat production per capita in the United States totaled 166.8 lbs. and in 1957 was 157.3 lbs., in contrast to the 1930 production of 130 lbs. per capita. In addition, poultry meat production was 32 lbs. per capita in 1957—very nearly twice that of the 1930 production.

This increase in per capita production of animal foodstuffs is even more striking when one examines the feed units needed to produce specified amounts of animal food. Throughout the past 15 to 20 years, one notes a striking trend toward more pounds of product for less feed consumed. For example, in 1940-44 the production of 100 lbs. of cattle and calves required the equivalent in feeding value of 1,015 lbs. of corn. In 1956, 897 lbs. of corn produced the same quantity of meat. Similarly, it took 18 per cent fewer feed units to produce 100 lbs. of milk in 1956 than during 1940-44, and 32 per cent fewer units to produce 100 lbs. of broilers.

This production level and the improved efficiency are due to application of scientific knowledge in animal husbandry. This includes improved animal breeding, better food supplies, better management, disease control and taking advantage of potentials in physiological alterations of growth of animals. Equally or more remarkable improvements in the distribution of meats have occurred. To appreciate this one need only reflect on the contrast between the modern refrigerated meat counter with precut and wrapped meats of all sorts and the general store of 30 to 40 years ago, which had no refrigeration and offered its customers fresh beef or pork only about once a week on "butchering day."

One may further appreciate the magnitude of these developments by examining the animal food industry of the countries which are economically and agriculturally less developed than ours. In so doing, repeatedly I am impressed with the tremendous gains which could be made in those regions by application of scientific knowledge to animal feeding, production, management and meat processing and distribution.

What has all of this to do with additives and the exercise of legal controls?

EFFICIENCY IN AGRICULTURE: Let me illustrate the answer rather than attempting to detail it. Fattening rations for swine and protein mineral concentrates for feeding with grain now usually contain an antibiotic and vitamin B₁₂, and the use of these supplements is reported to increase gains by as much as 15 per cent and to reduce by 2 to 5 per cent the feed required per unit of gain.

In 1957, 75 per cent of the cattle in feed lots received stilbesterol as a feed adjunct. This hormone, diethylstilbesterol, stimulates growth and reduces feed costs. The

growth stimulation is, on the average, stated to be 19 per cent and the decrease in feed costs to be 11 per cent. Hodgson summarizes succinctly the role of certain additives in feeds by stating "various hormones or hormone-like products, antibiotics, minerals, vitamins and chemicals are known to increase weight gains, increase milk and egg production and in some instances improve efficiency of feed utilization. Some antibiotics also have protective advantages. These drugs have not changed the quantity or value of the product. Before they are allowed in commercial use, it must be demonstrated that they or their residues are not contained in harmful amounts in the product the consumer eats."

In addition to use of antibiotics in feedstuffs, they are under active study and some limited use in preservation of poultry and fish and for retarding spoilage in larger animals as well. In the former they may be applied directly; in the latter, by infusion at time of slaughter. As a result of active treatment of mastitis in milk cows, some antibiotics are entering our milk supply. Antibiotics have also been examined as agents to prevent loss or spoilage of certain non-animal foodstuffs. It is evident that food production and processing can result in significant antibiotic residues in our diet.

The implication of small amounts of antibiotics in the food supply is difficult to assess. As a medical man, it seems imperative to me that non-medical uses of antibiotics must not be permitted to negate the lifesaving virtues of these drugs. It is well known that a small percentage of the population becomes sensitive to certain of the antibiotics after contact with them and that subsequently these particular antibiotics cannot be administered to the individual without harm. It is also well known that resistant strains of organisms develop as a result of repeated contacts with antibiotics. Decision as to the ultimate limits of usefulness in food production and processing, therefore, must be made with appropriate consideration of these effects.

HORMONE LIMITATIONS: Hormones affect animals and man—indeed, they are essential metabolites in normal physiology. Again, limitation of their usefulness logically appears to be determined by a few relatively simple considerations. These considerations include (1) the total quantity of this and physiologically similar substances which are likely to be consumed; (2) the direct and side effects of this and physiologically similar substances in any amount and particularly in the maximum quantity which may be ingested under conditions of use; and (3) the potential of the organism for accumulating or storing the additive on the one hand or excreting or destroying it on the other. Sufficient knowledge of this sort must exist, however, for each additive prior to reaching a decision to allow its use.

Evidence of this nature is essential for the evaluation of safety for use or hazard involved in the use of any additive. On the basis of appropriate evidence, I believe that a sound scientific judgment can be reached regard-

ing the safety of use of any substance in food.

I do not wish to review or contest any single decision of our regulatory agencies concerning a particular additive or action. Since there has been so much attention as a result of the debate over certain actions, and the so-called Delaney clause concerning the ban on any compound which, upon ingestion "of all or any part of such additives is found to induce cancer," it does seem pertinent to state a point of view relative to carcinogenicity.

First, cancer is a broad term which includes a multitude of diseases or manifestations, the origins of which remain ill understood by medical science. But cancer is not alone in this regard. We still do not know the multiple factors responsible for development of most of the non-infectious diseases, such as atherosclerosis, peptic ulcer, chronic nephritis and so on—indeed, even renal stones or gallstones.

We tend to be emotional about cancer and in our emotionalism feel that we can legislate against it. This appears to me to be both unscientific and unrealistic. The decision or judgment permitting or denying the

of ignorance as to the causes of cancer in the human, we should adopt measures to exclude even minimal exposures to any agent which in any amount might influence favorably the appearance of cancer in any biological species. I do not intend to be facetious when I depict the extreme to which this view might lead us.

"One might imagine persons wearing lead armor to prevent exposure to X-radiation. They might live a subterrestrial existence to avoid cosmic radiation. They might completely avoid sunlight; might breathe especially filtered and treated air; drink especially treated water; refrain from smoking, drinking coffee and tea, from eating any foods processed by roasting or smoking, and in fact, from consuming most foods. They might even refrain from consuming most if not all naturally-occurring foods. I am certain that no member of this panel recommends such a position. We all want a sane attitude to prevail.

"What is such a workable attitude toward foods which puts the problem of cancer in its proper perspective insofar as health and nutrition are concerned?

"The answer to this question is the principle which



EARLY registrants gather near AMI desk to receive their badges Friday morning. Approximately 7,000 conventioners attended the Institute's 55th annual meeting at the Palmer House in Chicago. This was the second highest registration for any annual meeting of the meat industry trade association.

use of an additive should be made not entirely on the basis of the occurrence or non-occurrence in experimental animals of a given result, such as appearance of cancer, but instead, on the "question of hazard from cancer as a result of use of a substance or degree of safety involved in the use of the substance."

As chairman of the panel of scientists selected by the National Academy of Sciences to discuss with the House committee on interstate and foreign commerce the recently-enacted color additives amendment, I attempted on the second day to summarize our position on the Delaney clause and the scientific considerations pertaining to it as follows (pages 466-468 of hearings report):

"I wish as chairman of this panel to attempt to identify considerations and views expressed which I judge to be especially pertinent to this matter.

"Despite the reservations expressed at times, the small points of scientific disagreement between some members of the panel and the ever-difficult problem of exact definition of terminology in this field, there seem to me to be important areas of agreement.

"First, all members of this panel are, I am certain, unreservedly committed to the objective of providing the maximum health protection for our nation. It seems unnecessary to state that all of us are against cancer and agree that every effective measure should be taken to reduce this disease.

"One view which might be taken is that in our state

should guide us in legislative planning.

"You have heard that many substances which are naturally present in foodstuffs can, under special conditions, or conditions of very high intake, be associated with the occurrence of experimental cancer. To mention some of these which were noted yesterday, arsenic, selenium, radioactive materials, even lipids or fats, some precursors of oxalic acid, etc. One could extend this list considerably. For example, one could even question the lowly turnip and its several relatives. These vegetables contain a substance which might be considered suspect since it is a naturally occurring antithyroid substance, which has certain actions in common with aminotriazol. The content in foods of all of these substances varies greatly. I do not know, however, of any evidence which links the ingestion of these small amounts present in foods to cancer in the human. They are unavoidable, and any workable legislation must allow the decision by someone or some agency that this happens to be the case.

"Evidence and examples have been presented that in experimental animals there are levels of dosing with proved carcinogens which do not produce during the lifetime of the experimental animal any detectable effect. For these animals, therefore, one may conclude that these are harmless amounts of a carcinogen, under the experimental conditions employed. There is yet

[Continued on page 121]

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CHICAGO 9, 1415 W. 37th St.

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PRAGUE POWDER @
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2,770,551



FREE TRIAL BAG
REGENT SOLUBLE SEASONING
TO MAKE 100 LBS. SAUSAGE

3 Great Brands of CORNE BEEF



(our Supreme)

(our Supreme)

(our Select)

All 3 brands of Colonial corned beef produce *more* repeat business and *greater profit* thanks to Colonial's unsurpassed skill and experience in curing methods. These are the tastiest, most appetizing products you have ever tried. Colonial trims better, to assure maximum saleable weight—and can tailor the weight range to your exact specifications. Whole briskets or consumer pieces, all wrapped in Cryovac.

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Tough, durable MYLAR® eliminates costly failures in vacuum packages

American Stores Co., like other leading packers, gives its packaged meats the extra protection and sales appeal of vacuum packages made with "Mylar"® polyester film and polyethylene.

These new vacuum packages have good clarity; superior strength and durability; virtually eliminate fading and greening; have low gas permeability, even at high humidities.

This means greater impulse-sales appeal... because clear "Mylar" shows all

the appetizing meat color it protects so well. This means reduced costs because of fewer leakers... even with extra-rough handling.

You, too, can give luncheon meats—and franks—extra protection and sales appeal by specifying vacuum packages made with "Mylar". For the names of Authorized Converters who supply vacuum packaging materials made with "Mylar", write to: E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware.

*Du Pont's registered trademark for its brand of polyester film.



REG. U.S. PAT. OFF.
BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY



STAY AHEAD OF COMPETITION HERE'S HOWE!

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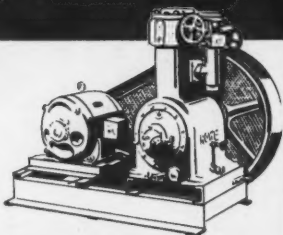
HOWE'S broad and long (48 years) experience is one way our engineers can help you stay ahead of competition. Let us demonstrate the value of this specialization by bringing you more efficient operation and better profits. *It pays to know HOWE!*

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Distributors in Principal Cities • Cable: HIMCO Chicago

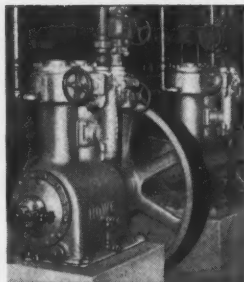
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UNIT, BRINE COOLERS • SURGE DRUMS • VESSELS
FIN AND PIPE COILS • FLAKE ICE MAKERS • RECEIVERS



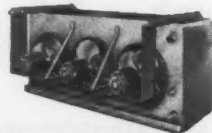
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POLAR CIRCLE COILS
For freezer storage as well
as normal temperature
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"We have been using the Cervin Electric Stun-O-Slaughter.

"It is very efficient for stunning hogs. We think it is easier to operate—you don't have to use any restrainer."

STUN-O-SLAUGHTER* SENIOR—for all size plants. Used on calves, sheep, hogs, sows, boars.

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APPLY ANYWHERE—behind the ears, over the ears, ahead of the ears, over the eyes, right-angle to the head, either side of the head, etc., with **ONE QUICK TOUCH**

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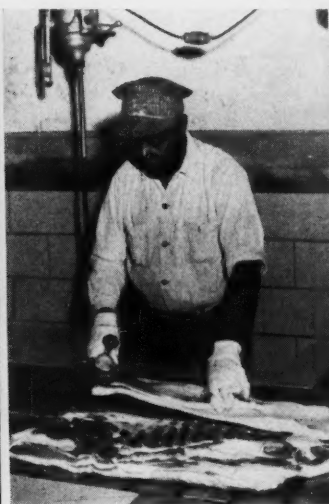
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Automation! HERE IT IS

WITH THE **BETTCHER Whizard**

ELECTRIC BONE TRIMMER AND FAT AND LEAN TRIMMER



The 3" Model 500, The 2" Model 520 Electric Bone Trimmers Used for the Following Operations:

- Trimming—Pork Neck Bones
- Trimming—Pork Back Bones
- Trimming—Pork Blade Tips
- Trimming—Pork Heads
- Trimming—Pork Hind Feet
- Trimming—Beef Heads
- Trimming—All Type Beef Bones Chilled or Hot
- Spotting—Livers
- Removing—Internal Ham Fat
- Removing—Beef Finger Bones
- ★ Saves Labor Costs
- ★ Saves Valuable Trimmings
- ★ Trims Bones Chilled or Hot
- ★ Boosts Production

The 5" Model 900 Electric Fat and Lean Trimmers Used for the Following Operations:

- Trimming—Pork Fat Backs
- Trimming—Pork Clear Plates
- Removing—External Ham Fat
- Trimming—Fresh Pork Bellies
- Removing—Fat from Beef Briskets, Beef Tenders and Beef N. Y. Strips
- ★ Saves Labor Cost—Average Savings 50%
- ★ Save Handling Time of Fat Backs and Other Trimming Operations by Trimming on the Conveyor
- ★ Get Leaner Trimmings
- ★ No Expensive Training Period for New Operators
- ★ Lower Bacteria Count of Trimmings Eliminates Dipping Blade in Hot Water

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PORK ☐

BEEF ☐

We cut up hogs per week.

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Have Representative call for demonstration ☐

Firm:

Attention:

Street:

City, Zone, State:

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The taste is great, your profits are greater with famous Harding's Corned Beef. Tender, delicious slow-cured for that wonderfully different and delicious flavor. It's not surprising that people ask for it by name! Sell the corned beef that sells itself — and means bigger profits for you!

A limited number of choice distributor areas are now available. Inquire today!

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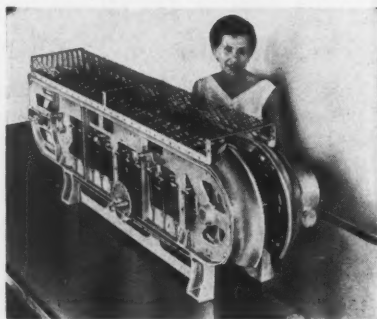
728 W. Madison Street • Chicago 6, Ill. • Phone: STate 2-8050

New

1960 Model C "FAMCO" AUTOMATIC SAUSAGE LINKER



See Page H/Fa



LATEST IMPROVEMENTS

Links Pepperoni, Polish Sausage as well as Pork Sausage & Wieners ... Links sheep and hog casings from 16 mm to 40 mm ... available with or without an automatic cut-off device ... adjusts automatically to casing diameter.

CAPACITY

3 inch links & up in 1/4 inch increments
UP 16,000 links per hour
1400 lbs. of Sausage per hour
TO 2200 lbs. of Pepperoni per hour

FEATURES

Now available in extra long links
Easy to install
Simple to operate
Saves 60% of your labor cost

Write for details about a free trial in your sausage kitchen

"FAMCO" AUTOMATIC SAUSAGE LINKER MACHINE

Division of Allen Gauge & Tool Co.

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Phone: CHURCHILL 1-6410



"Perfection"

BRAND

SMOKED MEATS

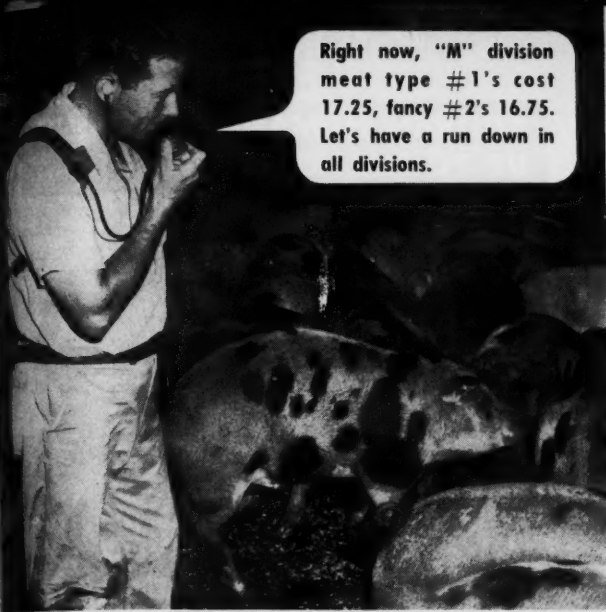
SAUSAGE

CANNED HAMS



WILLIAM DAVIES CO., INC.

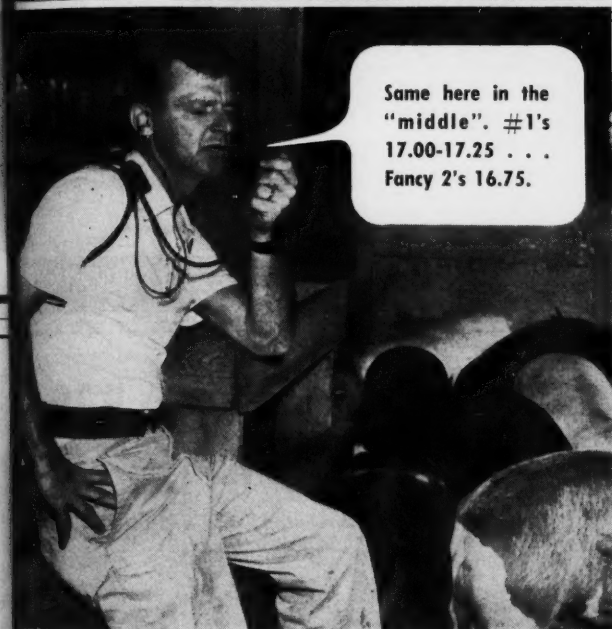
CHICAGO, ILL. • DANVILLE, ILL.



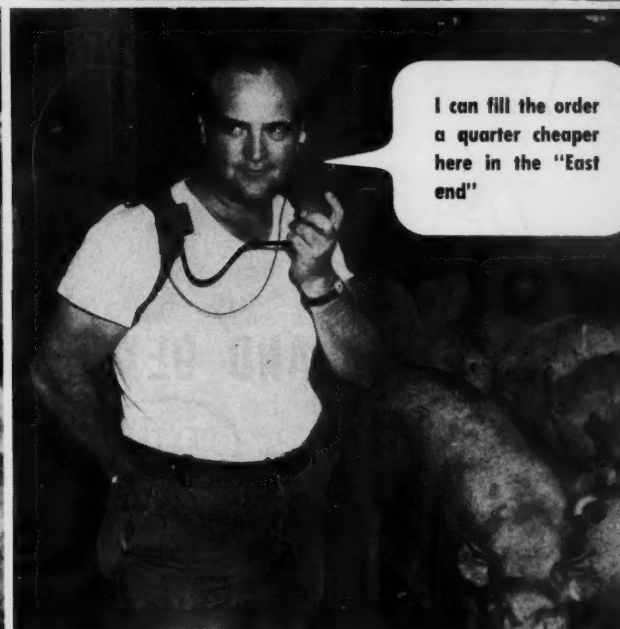
Right now, "M" division meat type #1's cost 17.25, fancy #2's 16.75. Let's have a run down in all divisions.



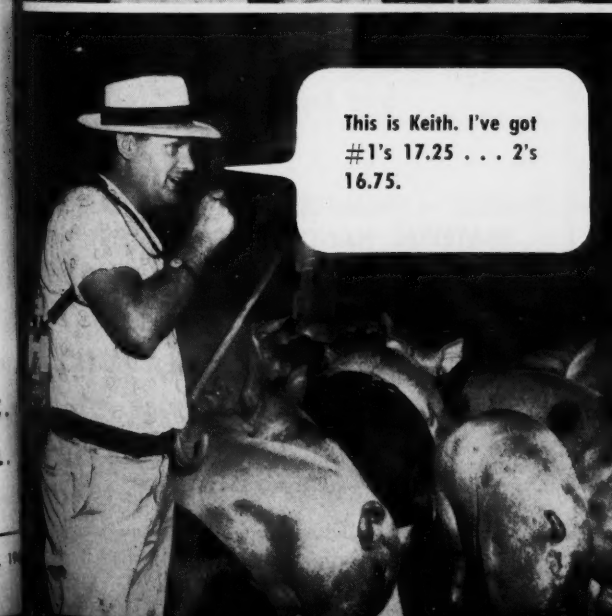
Right now "E" division is low . . . #1's at 17.00 . . . #2's 16.50.



Same here in the "middle". #1's 17.00-17.25 . . . Fancy 2's 16.75.



I can fill the order a quarter cheaper here in the "East end"



This is Keith. I've got #1's 17.25 . . . 2's 16.75.

Prices vary from one end of the yards to the other . . . we can save you money because we cover the entire yards to find the cheapest spots by walkie talkie.



Our new phone number at the

OMAHA STOCKYARDS is

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E, ILL.

OCTOBER 1, 19

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Packing houses everywhere have found that the complete Russell and Dexter lines of packing house cutlery are preferred by workers and in constant use day by day. They've found Russells and Dexters easier and quicker to work with . . . of top quality materials that *really* stand up to hard usage.

Remember if you use boners, stickers, skinners, butcher knives, steels or cleavers — whatever the job, there's a Russell or Dexter knife to do it better.

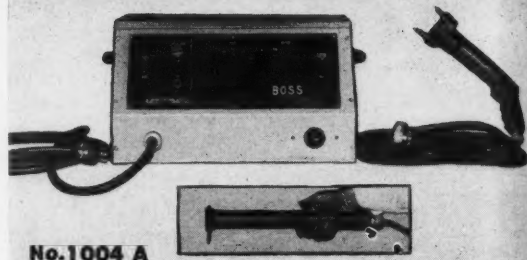
Ask your supplier for full information
or send for catalog.

AMERICA'S FOREMOST FINE CUTLERY SINCE 1810



RUSSELL HARRINGTON CUTLERY COMPANY
Southbridge, Massachusetts

**PROVEN HUMANE STUNNING
UP TO 750 HOGS PER HOUR...**



BOSS ELECTRIC STUNNER

May be provided with either "Wand" type applicator or "Pistol" applicator. "Wand" is preferred for smaller kills, as stationary restrainer usually requires that operator reach for hogs. "Pistol" is preferred with moving restrainer in which hogs are correctly positioned for stunning.

Operates at voltages of 70, 150, 225, 300 and 400 volts and for any period from 1/2 second to 3 seconds. Provided with circuit breaker. Will stun any size hog long enough to stick and bleed properly. In use in many small and large plants.

Boss Elther Stunner still available at lower price. Voltage 70, 150, 225 and 300 volts for from 1/2 to 1 1/2 second. Most economical and efficient way to comply with Humane Slaughtering Laws.

Ask for detailed literature on the Boss Stunner, Boss Cradle Restrainer and Boss Restraining Conveyor.

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TRAM RAIL & MONO RAIL SYSTEMS

*Designed, fabricated, and installed
to your specifications.*

**Complete Slaughtering, Packinghouse
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**TRACKS — TROLLEYS — SCALES — RACKS
MATERIAL HANDLING EQUIPMENT**

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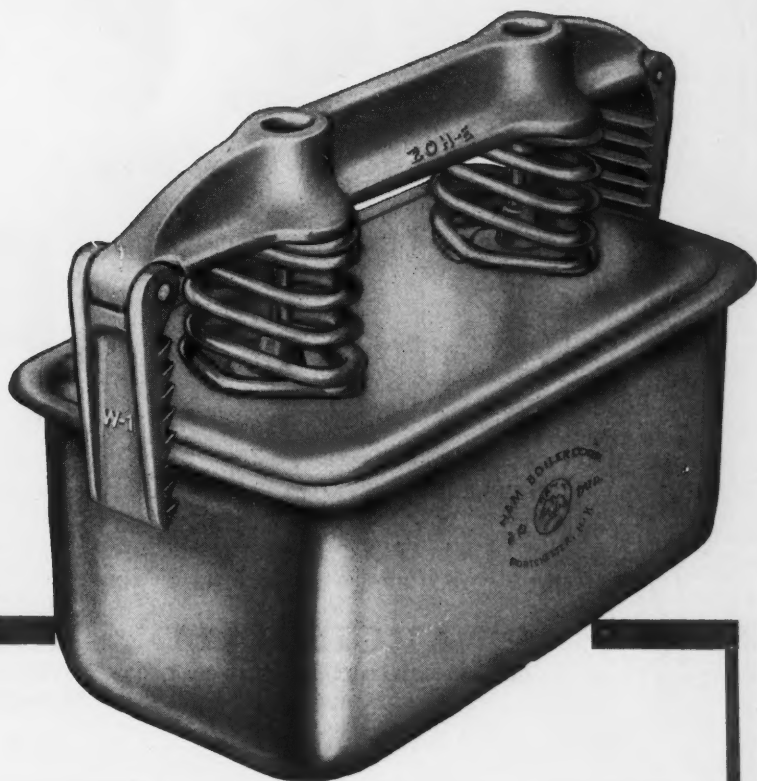
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550 W. 53rd St.

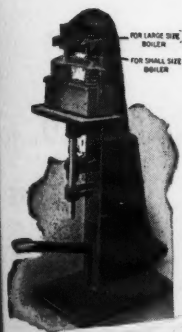
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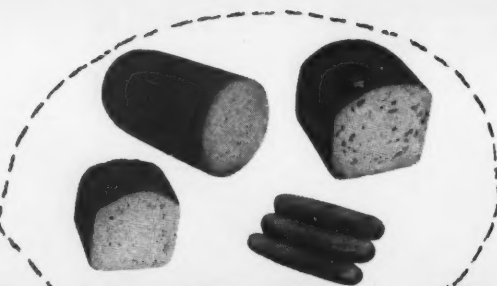
Adelmänn offers the most complete line available. Over 100 sizes, in ten different shapes. All in Cast Aluminum—some in Stainless Steel. Ask for booklet "The Modern Method," listing all and containing valuable ham boiling hints.

Adelmänn Ham Boilers have unusual and exclusive features, with demonstrated practical advantages. Elliptical springs, self-sealing and non-tilting cover, simplicity of operation, easy cleaning, and long life—all contribute their part toward successful results. Hams are firmly molded, have full flavor, and appetizing appearance. Hams produced in Adelmänn Ham Boilers sell!

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ADELMANN — "The Kind Your Ham Makers Prefer"



ACTO-PHOS

- The perfect phosphate blend
- Eliminates fat separation and prevents "fat caps"
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- Gives your product a full appetizing plumpness
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FROM **DEWIED**

Nothing matches nature when it comes to basic qualities—all that man can do is develop those qualities for better use. To get the peak of perfection in sausage, your fine formula with our quality casings provides the answer.

Natural sausage casings have never been matched for the downright goodness and flavor appeal they assure in finished sausage. We take the best raw natural casings—like those that have been used to make fine sausage for hundreds of years—and we make them better, easier and more profitable for you to use.

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We are America's fastest growing supplier of fine natural casings. It will pay you to find out why. May we serve you?

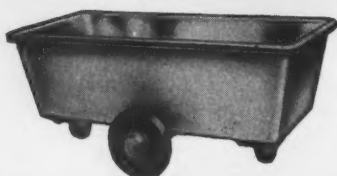
Your inquiry will be appreciated

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STANcase

STAINLESS STEEL EQUIPMENT



STAINLESS STEEL MEAT TRUCKS

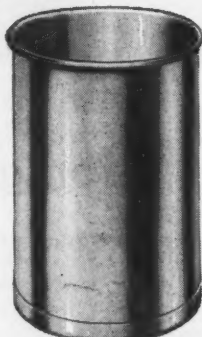
STANcase STAINLESS STEEL MEAT TRUCKS have been carefully engineered to meet the requirements of modern plants for long-life equipment which can be maintained sparklingly clean and sanitary with minimum labor. There are five STANcase Trucks with capacities of: 225 lbs., 500 lbs., 800 lbs., and 1,200 lbs. Each model has been sturdily constructed of heavy gauge Stainless Steel. Specifications for all component parts are of highest quality standards.

LONG-LIFE EQUIPMENT

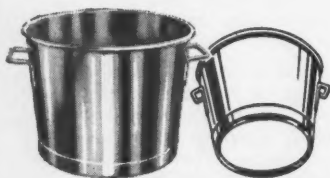
FULLY APPROVED BY HEALTH AUTHORITIES

Sanitary STAINLESS STEEL DRUMS

Ruggedly constructed for long-life service of 16 ga. Stainless Steel. Inside surfaces are seamless. Top rims are rolled over heavy reinforcing rods; foot rings are made of extra heavy Stainless Steel; both are closed all around, leaving no crevice where dirt or grime might accumulate. Available in three sizes.



Model No. 30—30 gal. cap.
Model No. 55—55 gal. cap.
Model No. 60—60 gal. cap.
COVERS AVAILABLE FOR
No. 30 and No. 55



All-Seamless STAINLESS STEEL TUBS

Model No. 98 — 56 qts.
Model No. 97 — 34 qts.
COVERS AVAILABLE

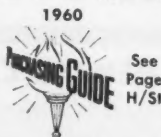
Ideal, sanitary equipment, seamless-drawn out of one sheet of 18 ga. Stainless Steel. The Stainless Steel foot ring and top rim are rolled over heavy, steel reinforcing rods and closed all around, leaving no crevice where grime might accumulate. Handles are Stainless Steel. Foot ring takes abuse of service; bottom of tub does not

rest on floor.

Write for NEW 1960 CATALOG showing our
FULL LINE OF STAINLESS STEEL EQUIPMENT

Manufactured by

THE STANDARD CASING CO., Inc. 121 Spring St. New York 12

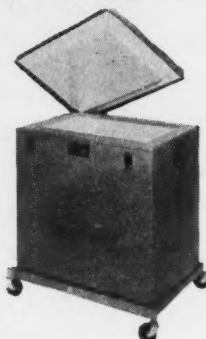


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- Ideal for Wholesalers, Purveyors and Vendors

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23" x 15" x 23" inside. 1 pc
Molded Foam Plastic —
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in Fiberboard case ...\$27.50

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Royalite inside
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Write for Performance Test Report on Frozen Meat Transportation.


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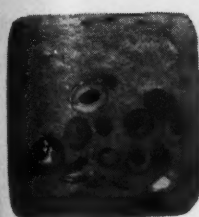
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and made with 
a little bit of love

New England Provision Co., Inc.
Boston, Mass.



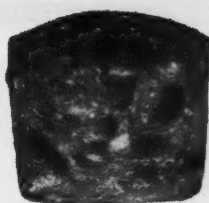
olive loaf



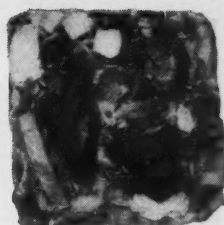
ham and cheese loaf



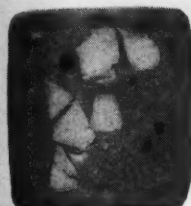
beef sausage



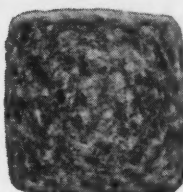
pepper loaf



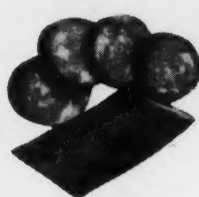
head cheese



ham and cheese loaf



luncheon loaf



Polish sausage

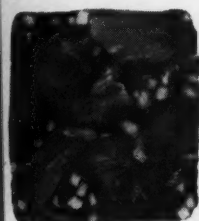


knackwurst

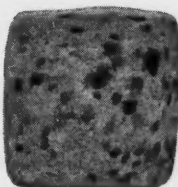


chopped ham

ARE YOU TAKING ADVANTAGE OF NEO-CEBITATE® IN THESE PRODUCTS?



tongue loaf



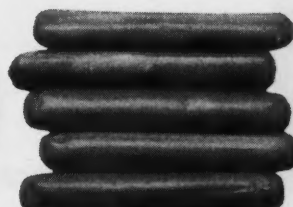
pickle and pimiento loaf



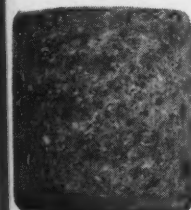
pork roll



pressed ham



skinless franks



spiced ham



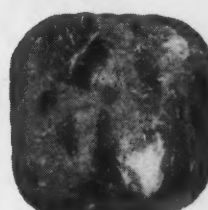
beerwurst



cervelat



pepperoni



pressed ham

Every one of these sausage items can benefit from processing with Merck Neo-Cebitate because:

- * Neo-Cebitate provides for better, longer-lasting cure color and protects against color fade at point of sale.
- * Neo-Cebitate improves production efficiency and increases production capacity by permitting a reduction in processing time.

These are the major reasons why most packers now cure franks and bologna with Neo-Cebitate. Why not take advantage of these benefits by processing all cured sausage products with Neo-Cebitate?

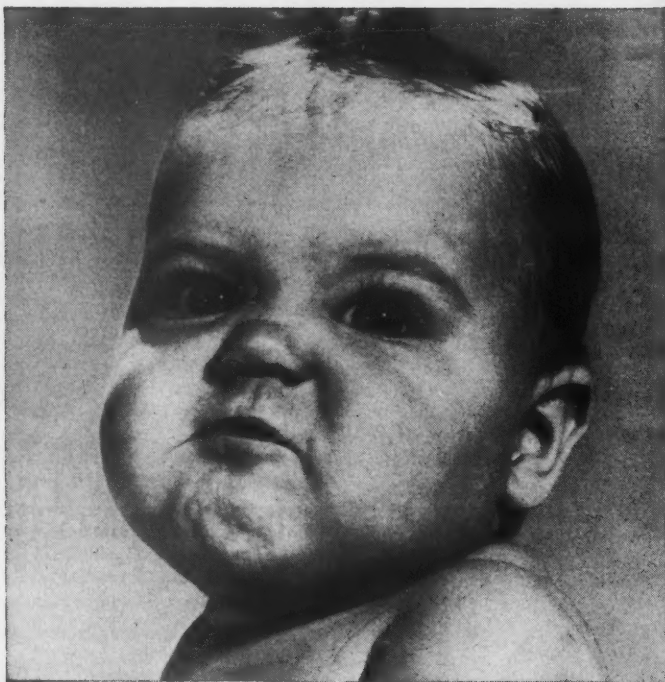
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(Sodium Erythorbate, Merck)



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Asmus Brothers

spare no effort to
produce the world's finest
spices and seasonings
—to make your product
taste better!



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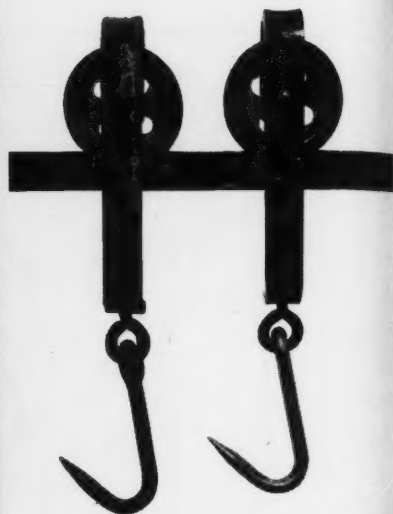
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Bright, clean trolley used to look like soiled trolley at left. A ten minute soak in Rustripper and a quick rinse snapped it back into condition. Cost: a fraction of a cent.

Rustripper. cleans 100 meat trolleys —for less than a dime

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Darby Talks at Additives Session

[Continued from page 104]

insufficient scientific knowledge to generalize and extend such conclusions for all types of compounds, or all animal species.

"Properly executed experimental studies in animals provide a valuable screen for carcinogenesis, but the screen is not infallible. The nature of appropriate tests will depend upon the individual compound under study. The interpretation of the significance of the occurrence of tumors or cancer during the course of or as a consequence of the administration of a test substance is dependent upon knowledge of the mechanism of the effect and other scientific information. Accordingly, some members of the panel have indicated that a prohibitive statement in the law such as 'shall be deemed unsafe if the additive is found to induce cancer when ingested by man or animal,' is not desirable.

"The need to rely on sound, informed and competent scientific judgment has repeatedly been emphasized. It has been suggested that provision should be made for the use of an expert committee of scientists for review of controversial problems of interpretations. This might take the form of the scientific review committees provided for under the Pesticide Act, or it might be composed of members of Health, Education and Welfare and Agriculture departments and of outside scientists nominated by the National Academy of Science.

"Several panelists have emphasized the need to make public experimental information or data upon which judgments or decisions are based, and to make this public at the time the decisions are announced. This is a recommendation made not only by members of this panel, but it was similarly urged by members of the 1957 panel on food additives provided by the Academy.

"It is believed that publication of such data would be in the best public interest, and would greatly strengthen support for sound decisions.

"It was indicated yesterday, that in the opinion of some, full protection to the public would be provided without a specific cancer clause. Dr. Miller cited the commissioner's statement on this matter in the 1957 hearings.

"Cancer is but one of many considerations in the assessing of the safety of a proposed additive. Clearly a consideration of it must be included in deciding on the permissibility for use. An additive with a possibility of harmful effects of any sort in the proposed use level should and can be declared by the commission as unsafe without the Delaney clause being in the legislation.

"If, therefore, one simply identifies or recognizes cancer-producing effect as one of the properties upon which judgment must be based in determining safety, it would appear to me—this is my personal opinion—that adequate protection would be afforded by the law without the inclusion of the Delaney clause.

"I think that a law providing this adequate protection combined with ample provision for scientific review and judgment, plus publication of the basis of decisions, would serve as a sound, effective, workable framework, which would assure for us the maximum health and benefit to the consumer and provide us with that flexibility which is necessary for the adoption of new improvements as these findings are afforded by scientific advances."

The food protection committee of the National Academy of Sciences, National Research Council, has considered in detail the problems in the evaluation of carcinogenic hazard from use of food additives and has set forth certain general considerations, principles and suggested methods for the evaluation of carcinogenicity.

ADDITIVES AND MEAT: Numerous additives may enter in the processing and preservation of meat products and fat. For you to appreciate the variety of these additives I quote from the FPC report entitled "The Use of Chemical Additives in Food Processing":

"The Meat Inspection Act provides for continuous inspection by means of inspectors located in the different processing plants. It provides for inspection of all animals slaughtered, and it requires that no chemical or additive be used without prior approval of the Meat Inspection Division of the Department of Agriculture.

"When a chemical is proposed for use and adequate information is not available regarding the safety of its use in food, the Meat Inspection Division requires that satisfactory toxicity and feeding tests be carried out. When adequate information has been obtained to demonstrate safety in the opinion of the Food and Drug Administration, the Meat Inspection Division may issue a regulation permitting the use of the chemical or additive in prescribed amounts.

"In addition to safety, certain other criteria may be applied by the Meat Inspection Division before permis-

"VOTE here for increased rendering efficiency" is slogan of supplier's exhibit. Jon P. Bergman, salesman for Bergman Meat Packing Co., Pittsfield, Ill., prepares to close voting booth curtain and "render" his choice in presidential poll. The V. D. Anderson Co. kept convention-goers informed on straw votes cast for presidential candidates Nixon and Kennedy.



sion is granted for use of an additive. In general, it must be shown that the additive serves a useful purpose. If the additive tends to hide evidence of the quality of a product or to mask the appearance of deterioration or spoilage, it may not be permitted to be used even though safety is not in question.

"The chemicals or additives used in meat products may be grouped in six classes: (1) preservatives and curing agents; (2) antioxidants; (3) flavoring materials; (4) coloring materials; (5) emulsifiers, and (6) refining and bleaching agents.

PRESERVATIVES: "The curing ingredients include salt, nitrates, nitrites, sugars or sirups, phosphates (disodium phosphate, sodium hexametaphosphate, sodium tripolyphosphate, tetrasodium pyrophosphate, and sodium acid pyrophosphate), ascorbic acid and sodium ascorbate.

"The use of salt in meat preservation and curing undoubtedly preceded recorded history. Originally the chief function of salt was to aid in the preservation of meat. With the advent of adequate refrigeration, chemical preservation became less important, and the amount

of salt used in curing has been reduced greatly. This has made possible the modern mild cured ham and other products, in which salt functions more as a seasoning agent than as a preservative. These products must be kept under refrigeration to prevent spoilage.

"Sodium nitrate and sodium nitrite are used in curing to obtain the pink color associated with cured meat. Nitric oxide from the nitrite combines with the pigment myoglobin of meat to form nitric oxide myoglobin. When heated, the nitric oxide myoglobin is converted into a more stable compound which gives to cured meats the desired pink color. Nitrate must be converted to nitrite before it can function in the development of the cured color. Nitrate-reducing bacteria convert the nitrate to nitrite.

"The function of sugars in curing is not completely understood. They may play a role in providing a reducing environment, which is necessary in color formation and for subsequent stability of the color. In the longer cures, sugars may play a role in retarding the growth of putrefactive microorganisms in the pickle. Taste tests have shown that it is difficult to distinguish hams cured without sugar from those cured with sugar. In cured bacon, sugar may serve to reduce the intensity of the salty taste and thereby contribute to the flavor.

"Ascorbic acid and sodium ascorbate are used to hasten the development and increase the stability of the cured color. The several phosphates are used to increase the water-holding capacity of the cured meat and thereby increase the retention of the meat juices.

"No preservatives are permitted in meat products for domestic use. For export purposes, certain preservatives may be used if their use is permitted in the country to which the product is to be shipped.

"Sodium benzoate or benzoic acid may be used in oleomargarine.

ANTIOXIDANTS: "Antioxidants serve a useful purpose in retarding the development of oxidative rancidity in lard, in shortenings made from animal fats and in animal fats used as an ingredient in dog foods and poultry and livestock feeds. The following antioxidants are approved by the Meat Inspection Division for use in edible animal fats and have been used commercially: resin guaiac, nordihydroguaiaretic acid, propyl gallate, butylated hydroxyanisole, butylated hydroxytoluene, and lecithin. Nordihydroguaiaretic acid, propyl gallate, butylated hydroxyanisole or butylated hydroxytoluene may be used in amounts not to exceed 0.01 per cent or in combinations in which the total amount of antioxidants does not exceed 0.02 per cent. Citric acid or phosphoric acid not to exceed 0.01 per cent may be added with antioxidant.

"Suitable antioxidants are added to lard and shortenings made from animal fats in order to increase the storage time of the fat and of foods made with the fat as, for example, crackers, pastry and potato chips. Nordihydroguaiaretic acid, propyl gallate, butylated hydroxyanisole and butylated hydroxytoluene are all effective in protecting the fat from rancidity, but of these only butylated hydroxyanisole and butylated hydroxytoluene are effective in retarding rancidity in the foods made with lard. It is estimated that at least 50 per cent of the federally inspected lard is now treated with the antioxidant butylated hydroxyanisole or combinations containing it.

"Satisfactory shortenings are now being manufactured from animal fats. This has been accomplished by improvements that are outstanding examples of benefits derived from the use of chemical additives. Through treatment of the fat with sodium methoxide, a rearrangement of fatty acids can be brought about resulting in the formation of triglycerides different from and



DELEGATES to 55th annual AMI meeting register early Friday morning. Shown here are early registrants filling out cards from which convention badges were made. Chicago's Palmer House played host to approximately 7,000 industry members at September 16-20 convention.

more suitable than those present in the original fat. The use of monoglycerides as emulsifiers and of 'carry through' antioxidants that continue to be effective in the baked goods has further improved shortenings made from animal fats.

FLAVORING MATERIALS: "Many of the natural spices and so-called soluble spices or spice extractives are used in the large variety of sausage and prepared meats. Protein hydrolyzates and monosodium glutamate are used to some extent. Monosodium glutamate is believed to act as a salt-type seasoning rather than as a condiment possessing a distinctive flavor.

FOOD COLORING: "The natural coloring matters, alkanet, annatto, carotene, cochineal, chlorophyll, saffron and tumeric, and a number of certified food colors are permitted for use under certain conditions.

REFINING AND BLEACHING AGENTS: "The following chemicals and materials are permitted for use in the refining of animal fats: sodium bicarbonate, sodium carbonate, caustic soda, acetic acid, tannic acid, diatomaceous earth, fuller's earth and carbons. Caustic soda, sodium carbonate, trisodium phosphate, sodium metasilicate, lime and a solution of hydrogen peroxide may be used in preparation of tripe. The added substances must be removed by washing thoroughly in water."

Another much-discussed source of additives of the so-called incidental type is various packaging materials. Packaging materials likewise have been the subject of report of the food protection committee, and I shall not attempt to deal with this matter in the remarks I am making to you at this meeting.

It is important, however, to recognize the problems posed by pesticides and the use of agricultural chemicals in animal products, i.e., fat, meat and milk. Residues of most organochlorine compounds which may be present on forage crops or which may be used on or in the vicinity of the animals themselves accumulate in the tissues or are metabolized by cattle and excreted in milk. Carter found DDT in numerous tissues, including T-bone steak and lean meat, from beef cattle fed hay containing 180 ppm. of DDT for a five-month period. Largest amounts, of course, were present in the fat. Hayes reported that the concentration of DDT in the fat of vegetarians averaged 2.3 ppm. while that in the general population was 4.9 ppm. He also found that meatless meals contained only about one-fourth the

content of DDT and DDE as meals served in ordinary restaurants. Dietary DDT has been found to be transferred to human milk.

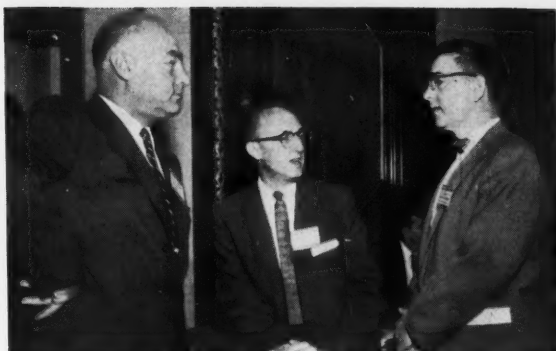
The need for assuring that exposure to these traces of residues is maintained at a harmless level has given rise to the legal or regulatory setting of tolerances for residues of pesticide chemicals. Literally, as you know, thousands of tolerances have been set. These tolerances are not maximal concentrations judged to be safe. Instead, they are safe concentrations set at minimal average levels consistent with good agricultural or processing practices. In other words, a tolerance may be exceeded and the product still be safe, although legally it would be subject to condemnation.

Related to the concept of tolerances and of some practical importance is the matter of insignificant levels of chemical additives in foods. The concept of tolerances is based on the generally recognized toxicologic principle that there is a safe level of intake for any chemical. The food protection committee has pointed out that there is an additional principle which has not been generally recognized or, in fact, stated, and which permits the ignoring of the presence of known quantities of chemicals in foods as though they were not present. At times the term, "zero," has been used to designate these finite least ignorable amounts. The basis of this concept is as follows:

"For every compound there is a level of intake below which there is no discernible effect upon health. In toxicologic testing, a level of intake of a compound having no demonstrable effect upon at least two species of animals and fed over a long period is generally referred to as a 'no-effect level.' Extrapolation from the 'no-effect level' in animals has been successful in defining a level of intake which has a negligible probability of injuring any individual in the population. This level is commonly referred to as the 'safe level' for use by man. Even though it is based on the best available quantitative biological information, the establishment of 'safe level' is a subjective mental operation. This operation takes into account the experimental data, particularly the nature of the injury from an excess and the variation of injury with variation of intake. Further, it interprets the significance of doubtful observations and allows for the variability of species and individuals. Last, it applies a margin of safety to compensate for factors which cannot be accurately evaluated. The subjective nature of the judgment upon which the 'safe level' is based inevitably confers some small uncertainty to the estimate. Thus, it is appropriate that regulatory safeguards be applied to prevent more than the 'safe level' from reaching the diet.

"The use of chemicals in food technology results in the incidental presence of foreign substances in foods. When the maximum amount, either as calculated from its proposed technologic use or analytically determined, of such a substance is sufficiently below the 'safe level,' the probability that injury will result from its presence approaches zero. Such a level, which can only be evaluated by a qualified expert, is certainly within the zone of toxicologic inconsequence.

"To define exactly the upper limit of the 'zone of inconsequence' or insignificant level of any material would require experiments using infinitely sensitive criteria of functional effect. No such criteria exist. Experiments can demonstrate the absence of effects of some particular recognized magnitude; they cannot demonstrate the absence of any effect at all. However, if adequate toxicologic data exist, those qualified by training and experience can judge whether a proposed intake is within the zone of inconsequence. If a reasonable extra-



COMMENTING on convention activities are (l. to r.): L. G. Buettner of Accent International, Skokie, Ill.; Charles Everson of Universal Oil Products, Des Plaines, Ill., and Dr. L. R. Dugan, chief of AMIF division of organic chemistry.

polation of the dosage-response curve shows the proposed intake to be far below the lowest intake that can be expected to produce an injurious effect, the proposed intake is within the zone of inconsequence; insofar as public health is concerned, regulatory action concerning it would be neither helpful nor necessary."

The evident complexities in the production and utilization of animal food—the chain from feed production to animal management, processing, packaging, distribution—affords a multitude of opportunities for additives to enter products. Some of these additives are of recent origin; others are time honored. Because of the extensive scientific attention to the new substances, it is probable that we are better protected today than were

DISCUSSING convention activities are Carl Mayer, (left), vice president of Oscar Mayer & Co., Madison, Wis., and Ronald Goodman of Chicago, public relations counsel for the company.



our forefathers when they initially put into use certain agricultural practices, certain methods of meat preservation and the like without the benefit of today's sophisticated scientific knowledge and judgments.

I believe industry, agriculture, and regulatory agencies are unreservedly committed to the objective of providing a maximal health protection for the consumer—and this includes an abundant, nutritious, safe and attractive food supply and one economically within the range of all consumers.

If we work within this perspective our practices, laws and regulations will continue to evolve in keeping with our needs and understanding.

Throughout it is imperative that all engaged in this complex wage a constant campaign directed toward improved education and understanding by the key individuals. These key individuals range from the farmer, who produces the hay consumed by the animal, to the industrial processor and to the law maker, who sets the framework within which agriculture, industry and the consumer must live.

Additives is One of Many Areas where MID Keeps Meat Safe and Wholesome

MID chief C. H. Pals tells how agency checks materials and packages and works with FDA, packers and agriculture.



IT IS well known in the meat industry that proper chemicals and food additives are essential to the production of most of the products of this great industry. Meat food products include extremely complex combinations of meat and meat by-products, non-meat food materials and chemicals that are added for a host of reasons.

For over 50 years the Meat Inspection Division has been carrying out its responsibility under the Meat Inspection Act for the prior clearance of all additives and processes used by meat packers operating under federal meat inspection. The Meat Inspection Act of 1906 clearly defines the responsibility in this field, as follows: "... and said inspectors shall mark, stamp, tag or label as 'Inspected and Passed' all such products found to be sound, healthful and wholesome and which contain no dyes, chemicals, preservatives or ingredients which render such meat or meat food product unsound, unhealthful, unwholesome or unfit for human food; and said inspector shall label, mark, stamp or tag as 'Inspected and Condemned' all such products found unsound, unhealthful and unwholesome, or which contain dyes, chemicals, preservatives or ingredients which render such meat or meat food products unsound, unhealthful, unwholesome or unfit for human food, and all such condemned meat food products shall be destroyed for food purposes, as hereinbefore provided, and the Secretary of Agriculture may remove inspectors from any establishment which fails to so destroy such condemned meat food products." (21 U.S.C. 74).

The Meat Inspection Division is further authorized through the Secretary of Agriculture to issue regulations. I again quote from the law: "... and said Secretary of Agriculture shall, from time to time, make such rules and regulations as are necessary for the efficient execution of the provisions of this act, and all inspections and examinations made under this act shall be such and made in such manner as described in the rules and regulations prescribed by said Secretary of Agriculture not inconsistent with the provisions of this act." (21 U.S.C. 89)

The meat packer desiring to operate under federal inspection applies for the inspection and agrees to conform to all requirements of the law and regulations. After a packer has decided that his business is such that he will need to operate under federal meat inspection, he files along with his application the plans of the facilities in which he expects to operate. The central office review of these plans is for the purpose of assuring that the necessary facilities for good sanitation and inspection are being provided. This is a business-like way for the packer and the MID official to confirm their understanding as to how the plant is to be prepared and operated.

The inspection program provides those controls that

will assure against the contamination of product by unacceptable additives, residues or contact materials. Regulations issued by the Secretary on this point include the following: 'No product shall contain any substance which impairs its wholesomeness or which is not approved by the director of Division' (9 CFR 18-7), and "No fixtures or appliances, such as tables, trucks, trays, tanks, vats, machines, implements, cans or containers of any kind, shall be used unless they are of such materials and construction as will not contaminate the product..." (9 CFR 18-6).

MID'S RESPONSIBILITY: From the foregoing, I am sure we will agree that legal responsibility for the control of additives in meat products has unquestionably been assigned to the Meat Inspection Division of the Agricultural Research Service, USDA. It should be understood then that the Meat Inspection Division has the responsibility for controlling in federally inspected establishments everything that is used in the manufacture of the meat or meat food product and everything that may come in contact with the meat or meat food product, either directly or indirectly.

To obtain approval for an additive or a new or changed process, the advocate of a proposal furnishes complete information concerning it to the Meat Inspection Division. This includes all necessary test data to show that it is safe and that it will not have an adverse effect on the product. It is customary for plans for testing to be discussed thoroughly with Meat Inspection Division staff officials before proceeding with tests. This kind of planning often saves considerable time and money since all possible questions are raised before testing begins. The cost of such testing is, of course, borne by the proponent. In evaluating test data, the division has its own facilities which can carry out tests including bacteriology, serology, histology, pathology, toxicology, pharmacology and chemistry. This work is, of course, supplemented by consultations with scientists in other laboratories in the Agricultural Research Service and various other agencies both in and out of government.

Not all problems connected with the addition of chemicals or residues are under the direct control of the Meat Inspection Division. Today, chemicals are widely used in nearly every type of livestock and crop production. These include a large number of pesticides, fungicides, growth regulators and chemicals designed to increase the feeding efficiency and health of livestock. They are essential tools of production and can do great good if properly used. Improperly used, however, they can be harmful or even dangerous.

The Poultry Division of AMS in the Department of Agriculture has been given similar responsibility for the safety and wholesomeness of poultry and poultry products. The Food and Drug Administration has the

responsibility for the safety and wholesomeness of all other foods under the Federal Food, Drug and Cosmetic Act. The Food and Drug Administration also has responsibility for animal feeds and drugs other than veterinary biologics. The Food, Drug and Cosmetic Act of 1938 is regarded as a good comprehensive general food law with strong powers of administration vested in the Secretary of Health, Education and Welfare. In the enforcement of this and the former law, the Food and Drug Administration has established an enviable reputation for fair and impartial enforcement. The American consumer has had great confidence in the nation's food supply.

FDA'S AUTHORITY: In recent years the Food and Drug Administration has been given responsibility for the pre-clearance of the growing number of additives to food for which it has responsibility. Under the Food Additives amendment, the Food and Drug Administration was given pre-clearance authority over additives in foods similar to that which has been exercised by the Meat Inspection Division for meats and more recently by the Poultry Division for poultry products. The Food, Drug and Cosmetic Act contains language which clearly identifies its authority in the meat field. Section 902 (b) of that act carries a specific exemption for meat as follows: "Meats and meat food products shall be exempt from the provisions of this act to the extent of the application or the extension thereto of the Meat Inspection Act approved March 4, 1907, as amended." (U.S.C. 1946 edition title 21, Section 7196; 34 stat. 1260, etc.)

It is clear that in the area of additives in meat the Meat Inspection Division has the authority and responsibility to act. We are continuing to carry out this responsibility.

Concern by eminent pharmacologists, toxicologists, physiologists, nutritionists and other food control officials that many of the chemicals now used in foods were not being sufficiently tested to establish their non-toxicity and suitability in foods resulted in the recent Food Additives Amendment to the Federal Food, Drug and Cosmetic Act of 1938. As indicated earlier, this law, as amended, provides for advance clearance of food additives prior to acceptance for use in foods.

The term "food additives" has, since passage of the amendment, created quite a stir in the food industry. The impact of this has been and is now being felt by the Meat Inspection Division in its contact with suppliers of the meat packing industry and with the industry itself. Many people have interpreted the language of this amendment to mean that there has been a change in the ability of the Meat Inspection Division to act on use of proposed materials. Actually, the Meat Inspection Division has, since the enactment of the Federal Meat Inspection Act of 1906, required prior clearance of a chemical before its use was permitted in meat or meat food products. That is, it has required a showing of the safety and suitability of a material before its use has been permitted.

CONFUSION APPARENT: Recent correspondence indicates there has been much confusion in the industry regarding the approach to follow in having a material accepted for use in meat and meat food products bearing the marks of federal meat inspection. Some have indicated that in their opinion, if a substance is listed in the *Federal Register* by the Food and Drug Administration as being safe for use in food, or if such substance has been granted an extension in time, its use should be allowed by this division.

It should be recognized that simply because a substance shows up on one of these lists is no guarantee

that it will be accepted for use in meat food products subject to our inspection, as there are other considerations besides safety which determine acceptance of a material. Safety, of course, is of paramount importance in considering a material for use. We do, of course, rely upon the experience and counseling of the technical people of Food and Drug Administration with respect to the evaluation of safety of a material. However, a final decision as to its use in a meat product rests with this division.

Those additives permitted by this division have been thoroughly examined and all proposed new additives come under searching review. Through the years such information has been published and is readily available. If a meat packer subject to the act wishes to use a chemical in a meat food product and such chemical has not previously been accepted, he must request permission of the Meat Inspection Division. He is required to show, among other things, that the proposed chemical is harmless in the amount and manner in which used. The burden of proof of safety is upon the proponent. Toxicity tests are not conducted by the Meat Inspection Division. For this reason the petitioner requesting acceptance for the use of a new chemical in a meat food product must assume the burden of proof that it is safe and is otherwise acceptable. Although a petitioner is given the burden of proof, the Meat Inspection Division recommends the testing techniques and facilities and reviews all available information concerning the new chemical.

EVALUATION OF ADDITIVE: Questions which must be resolved in evaluating a new additive for use in meat or meat food product are as follows:

- 1) Is it safe for use?
- 2) Does it serve a useful purpose? That is, does it enhance the quality of the product by improving its flavor, texture, appearance or nutritional value?
- 3) Does it result in deception? In other words, does it improve the outward appearance of the product, yet result in an inferior one?
- 4) Does the substance have preservative properties and does it tend to make a product appear sound when, in fact, it is used in lieu of maintaining good sanitation practices in the preparation of product?
- 5) Can the use of proposed additive be adequately regulated by inspectional or laboratory control?

If a food additive can emerge favorably in the face of critical scrutiny with respect to these criteria, its use may be permitted. The words "food additive" as used here refer not only to those materials which are added directly to the meat food product but also to all those materials that enter into the environment of food or may come in contact with it. For example, this latter group includes detergents, sanitizers, boiler compounds, pesticide materials, food contacting surfaces involving a wide variety of food handling equipment, packaging materials, containers and even the atmosphere of the packinghouse itself. With respect to modern packaging materials and food handling equipment, the review involves approval or disapproval of a large number of synthetic resins, plasticizers, stabilizers, lubricants, pigments and many other miscellaneous materials of which the items are composed.

Meats are subject to contamination in the processing operations by detergents and sanitizing preparations used in cleaning packinghouse equipment. These chemicals are deposited on the edible products equipment during the cleaning operation and, unless such equipment is thoroughly rinsed, it may contaminate product coming in contact with it. Some detergent materials are, of course, used directly on animal carcasses or

parts. Chemicals used in hog-scalding water and in the preparation of tripe are examples. In this connection, only those substances known to be safe are permitted, and the operation is geared so as to remove all residues before product enters the channels of trade.

Packaging materials are potentially a source of chemical contamination of meats. The major function of packaging material is to protect the meat from contamination; it serves no purpose for any of its components to get into the product. There is, however, a good chance that there will be at least a slight degree of transfer of one or more components of a packaging material into the product enclosed. For this reason, a determination of what and how much to expect in the way of contamination of meat food product or other food items by packaging materials is approached by study of extractability of the components. This determination, as mentioned previously, is done at the expense of the proponent, using a procedure and testing facility approved by the Meat Inspection Division.

RADIOACTIVITY: The possibility of radioactivity in meat has commanded considerable attention. This activity may be the result of radioactive fallout. Very little information is now available on the radioactivity of meats. In order to accumulate more data in this respect, the Meat Inspection Division is currently conducting a study to determine to what extent meats may be contaminated as a result of radioactive fallout. It is expected that through this project we will accumulate important background information for future use. A great deal of effort has gone into the testing and development of the use of ionizing radiation for the sterilization of food.

In the field of residues in meat animals, the greatest problem is presented by pesticides with which animals are treated directly or which they ingest in forage and feed. Of the pesticides, those chemicals belonging to the chlorinated hydrocarbon group are most troublesome because of two properties common to nearly every member of the group. These properties are persistence and accumulation. DDT, for example, may accumulate high levels from daily intakes of less than one part per million and persist for many months after exposure ceases. The organic phosphates, on the other hand, do not in general accumulate and are rapidly eliminated. Some undergo decomposition in the digestive tract of ruminant animals.

Concern for the health hazard resulting from improper use of pesticides resulted in passage of the Miller Amendment (Public Law 518-83rd Congress) to the Food, Drug and Cosmetic Act. This law, in effect, forbids the interstate movement of a raw agricultural commodity which contains a residue of a toxic pesticide. Incidentally, live animals are not considered raw agricultural commodities. Provision is made in the law for the establishment of tolerances by the Food and Drug Administration. Before a tolerance is established, a pesticide must first have been certified as useful to agriculture by the Secretary of Agriculture, and the label for the pesticide must have been approved by the Pesticide Regulation Branch of this department. If the tolerance applies to uses on meat animals, the Meat Inspection Division is consulted.

TOLERANCES SET: At the present time, the following tolerances applicable to our responsibilities have been set by the Food and Drug Administration. The Meat Inspection Division tolerances are identical with those listed: Methoxychor—three parts per million in the fat of meat from cattle, sheep, swine and goats; DDT—seven parts per million in the fat of meat from cattle, sheep, swine and goats; Toxaphene—seven parts

per million in the fat of meat from cattle, sheep, swine and goats; Lindane—seven parts per million in the fat of meat from cattle, sheep and goats and four parts per million in the fat of meat from swine; Malathion—four parts per million in meat and by-product from cattle, sheep, swine and goats, and Delnav—one part per million in fat of meat from cattle, goats, swine and sheep.

The first four are cholinated hydrocarbons which accumulate preferentially in the fat; malathion is an organic phosphate which does not. Delnav is an organic phosphate which deposits in the fat but does not accumulate appreciably.

An organic phosphate, ronnel, has recently been accepted as a systemic added to the ration of beef cattle for treatment of cattle grub infestation. A 60-day withdrawal period is required prior to slaughter and the tolerance in meat is zero.

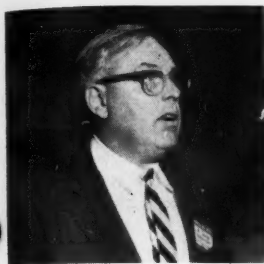
In discharging our responsibility for the wholesomeness of meat which is inspected by our division, we have a continuing program of sampling to detect pesticide residues. By this means, we are able to determine whether residues in meat are a problem in any specific area and to take whatever corrective action is required. We are now putting into use a much more rapid detection procedure than we have had in the past, which will furnish us with even more effective control over residues of the chlorinated hydrocarbons.

DRUG RESIDUES: Other residues which may occur in the carcasses of meat animals are the result of treatment with various drugs. The most commonly used are the hormones, antibiotics, tranquilizers and perhaps the nitrofurans. Antibiotics at the levels customarily added to livestock rations do not leave detectable residues in the carcasses of treated animals. Of the hormones, diethylstilbestrol is by far the most commonly used. Instructions were issued last year for inspectors not to pass on ante mortem inspection animals that had access to hormone containing feed within 48 hours before slaughter. Following the required withdrawal period before slaughter, no residues are found. We have available for the detection of hormone residues a bioassay which is sensitive to as little as two parts per billion.

Of the tranquilizers, one has been approved for addition to the ration of feeder stock. With the required withdrawal time, no residue is detectable in the tissues. Another tranquilizer has been found not to leave residues when injected prior to 24 hours before slaughter. However, the possibility of interference with ante mortem inspection is being investigated.

The enactment of the Food Additives Act has somewhat complicated the residue picture in that a pesticide, for example, may also be a food additive. This is true in the case of the pesticide ronnel, the systemic insecticide previously referred to. Ronnel is added to a beef cattle ration, making it a food additive under the act as well as a pesticide under the Miller amendment.

We are aware that there are many interests today devoting considerable resources to the development of new additives and new uses for additives over the full range of ingredients and other environmental materials or both. This developmental work makes great contributions to the efficiency of food production and distribution. American enterprise needs the full benefit of these developments if it is to serve best the public interest. The food producer, the distributor and the consumer all benefit from such activity. While we in meat inspection wholeheartedly support these developments, we must, of course, permit only those materials whose use will not result in an unwholesome product or one which would otherwise be deleterious to the public.



Institute Grasped Nettle of Additives Early to Maintain Meat's Wholesomeness

AMI vice president Aled Davies tells how association has worked with scientists, government and farmers on problem.

THE title of my brief remarks is "The Food Processors' Responsibilities to the Public." The over-simple answer, of course, is that our responsibility to the public is the public interest. Sometimes it is extremely difficult in the heat of controversy, and the shattering effect of press conferences, to decide wherein lies that interest.

Some years ago the American Meat Institute and the American Meat Institute Foundation became concerned about this new frontier into which processing of foods had advanced so rapidly, and that was in the field of chemicals of every kind, and chemical aggregates. First, chemicals are here to stay. They have been around for a long time, and I would urge those of you who are interested in this subject to read at your leisure a pamphlet, "The Good in your Food," given at a symposium before the Super Market Institute, where this question was discussed in a different area from what has been discussed here.

Some things I heard that day have stayed with me. Dr. Herrell DeGraff, for example, made the point that the peak of available agricultural land in production in this country was reached in the 1920s, and were it not for the chemicals, pesticides, fungicides and additives of various kinds, we could enjoy today neither the quantity nor the quality of the food supply of which we are so proud as processors and which the consumers enjoy. But as we have assumed more and more of the responsibility of the mother and the housewife and have come more and more into the kitchens of America, we also have to lean over backward to be, like Mrs. Caesar, "above suspicion."

The meat industry has an enviable reputation, very dearly and hard earned, of being like Mrs. Caesar, "above suspicion" on the wholesomeness of the meat supply. This has come about by the public acceptance to a large degree of the Meat Inspection Division and the serious and cooperative attitude of the meat industry with that service and with other services of similar nature. So when it came to our attention that there were problem areas, the American Meat Institute, through its representatives, immediately went to work with various agencies of government to try to do what Dr. Darby suggested earlier, namely, alert key individuals to the problem and then try to find constructive answers to it.

SHHH—THEN CRANBERRIES: As a complete layman in this field, I want to tell you that it was extremely difficult, prior to November of last year, to get discussion of this subject. I remember very vividly having a very cozy conversation with the board of directors of the National Grange in Long Beach, where I urged the board to join with the American National Cattlemen's Association and the Farm Bureau and the rest of us in insisting on coordination of knowledge and effort in meeting the issues of pesticides and chemicals. I was being extremely careful in discussing this, because I

was cautious and also scared of public discussion.

Some of those very fine people leaned back and said they thought it was important, yes. We went downstairs, and on the street we saw newspaper headlines about cranberries. I can assure you we had no difficulty after that in getting a hearing anywhere to discuss the matter. Regardless of the right or wrong of the cranberry incident, or the chicken incident, it did do one thing that perhaps was cheap at the price. It got a discussion going of this area of chemicals in agriculture and chemicals in food to the point where we could discuss it here today and other places without scare headlines. Also, it has given people in government, in industry and in agriculture the impetus to face up to some of these problems.

I am very gratified at the way the government and government agencies moved into this field, culminating in the Kistiakowski report. I was also increasingly impressed with the stature of the people in various agencies of government dealing with this subject, and I think the meat and livestock industries demonstrated that they were not interested in pitting one agency against another. What we were after then, and what we are after now, is the public interest and preservation of the confidence of the American people in their food supply, along with a realistic approach to the problems of additives and chemicals.

What do we do? We do what we have done, except more of it, and that is to work with government and to lean over backward to be in the forefront of those who demand protection for the consumer. Concerning the chemicals and additives over which we have control, let us be sure that we are using them only according to directions and that we are working with regulatory agencies under which we operate.

On the question of these other fields that involve additives or chemicals or pesticides in and on the animal prior to our control of it, the position we have taken throughout this discussion in the past two or three years has been, and is today, that we hold three areas responsible: the chemical companies that manufacture the product, the government agencies (and the government itself) that approve use of that product and the producer who uses it.

I am extremely gratified at the way the farm organizations and the livestock organizations—specifically, for example, in the field of cattle, the American National Cattlemen's Association—are doing a tremendous job of working with their members and others all over the country to get them to use these pesticides according to the book. Other farm organizations are doing the same thing: the U. S. Department of Agriculture through the Extension Service; our own Institute through the information we have passed on to our members.

MORE REALISTIC APPROACH: However, I think the best thing that has happened, with the exception of sometimes a scary or overdrawn article that we run

across, is that, by and large, there is a better and more realistic approach to this problem. I think the press has been amazingly responsible for this realistic attitude, and I think, by and large, it will continue to carry this responsibility.

The responsibility of the food processor is, of course, the public interest. In this field, I can do no better than quote from the farewell of Dr. A. R. Miller as director of the USDA Meat Inspection Division. He said: "The consumer can satisfy the meat protein need in her diet with full confidence that the meat is clean and wholesome. The consumer confidence assures a sound and vigorous livestock economy which is the backbone of the farm economy that is so essential to our national interest."

If we can get what Dr. Darby was talking about, namely, scientific review and judgment in legislation, if we can continue to have a realistic and sane approach in government and industry, and if we will continue not to be satisfied with materials that have questionable residues and if we will press forward to find methods in the field of pesticides, for example, that do not leave a residue, then we will have the answer. I am delighted that the Congress of the United States has appropriated funds for the Department of Agriculture to build a laboratory dedicated to this purpose. I am proud of the American Meat Institute, the first organization to recommend such a move, because the answer is eventually that where residues are a problem, we will have to find other ways and means of handling pests. I think we are going into the new year with less chance of hysteria and more chance of finding real answers.

QUESTIONS AND ANSWERS

CHAIRMAN D. M. DOTY: Are there any questions from the audience?

QUESTION: I would like to ask Dr. Darby how much consideration is given to the average intake of a certain food when a specific tolerance for an additive is set for this food?

DR. DARBY: I am not sure that I can answer your question, but certainly very early—10 years ago—in attempting to set forth principles for consideration of additives in foods, the Food Protection Committee stressed the need to consider not only the amount of a given food substance that might contain an additive but also the amount of this food that might appear in the diet of different segments of the population. If the food would be consumed in larger quantities by one segment of the population, then it would be essential not only to consider the average per capita intake but also the expected intake of the group that might consume the largest quantity. Of course, I cannot speak for those who set the tolerances.

CHAIRMAN DOTY: I have a question that I would like to address to Dr. Darby. You mention the problem which arises in connection with the use of an antibiotic as a preservative for food products and indicated that we must be extremely careful that use of these materials does not result in harm to the population nor to the effectiveness of these materials as they are put into particular agents. Is it not true that there are some antibiotics whose use does not result in resistant microorganisms nor in human sensitivity to their use? And if this is true, would there be from a strictly medical-scientific point of view any objection to their use as a preservative?

DR. DARBY: I don't believe that I know of any antibiotic which one could be positive has not at one time or another proved to be a sensitizing agent. Of course,

there are certain ones to which more people are sensitive than others. Certainly, if there were an antibiotic which did not result either in sensitizing certain individuals nor producing resistant organisms, then I think we certainly would see no objection whatsoever to its use unless there were some other influence we don't currently recognize. I could conceive of some kind of development in the future which might control certain antinotics for food use, just as comparable antibiotics are controlled for therapeutic use.

CHAIRMAN DOTY: I have another question for Dr. Pals. He made it clear that even though the Food and Drug Administration may approve a specific additive, it can be used in meat only if approved by the Meat Inspection Division. I would like to ask what the situation is in reverse. Does the MID ever approve for use a chemical that has not been approved by the Food and Drug Administration?

DR. PALS: That is, of course, a possibility, but I am not up against that one.

DAVIES: Dr. Pals, do you find improvement in the pesticide residue level this year over the past two years because of possible educational work in the field?

DR. PALS: I think that there has been improvement in that area. Everyone has become much more conscious of his responsibility for operating carefully. We think we have exercised careful restraint in our activities in this area because there is so much we need to know about how to get to the problem. As I indicated, a test that will permit action within a reasonable time is something we must have. I do not want to imply that we are entirely ready to go into high production on this. That is not the case, but I think this is like many other fields in which we have operated. Once people know what the problem is and they recognize it as being a reasonable one which they should reasonably support, then we really get good cooperation. This goes all the way from the chemical producer to the research worker, to the commercial man and, of course, to the final user of the particular chemical. I think that we are in a rather healthy state here as long as we keep communicating with each other and, by doing that, I believe that we will keep the problem moving in the right direction.

CHAIRMAN DOTY: I have another question which relates particularly to the problem that arises when we have specific scientific evidence indicating possibility of harm to the population, and the resulting scare and emotional sensationalism which results. Mr. Davies has indicated that the press has been most interested in this current situation with respect to additives and residues and has been most cooperative. However, this has not been true of some of the sensationalistic writers. I am sure that all of you are familiar with, or have heard of, the book on "The Poisons in Your Food." I know that I have taken a most basic interest in it because I saw the review. Mr. Davies, is there anything which we, as individuals or perhaps as an industry, can do to counteract the emotional reporting which always occurs when we have this type of situation arising?

DAVIES: I think that the best defense is knowledge. Communication between industry and government, industry and producers and, where possible, a frank discussion is helpful. People are intensely afraid more of the things that they do not know than those which they know. I don't think there is much you can do about the crime but giving proper information is something that you can do. I know that my own neighbors and my own family, when they first heard about this, were quite scared until they started to face up to the fact that we are all just one big heap of chemicals. I do think that the best way to handle it is to get much factual and

sound information out and to let the people know that they have the protection of this scientific knowledge and review which is available through all these government agencies, as well as in the industry. I think the thing that shocked us all in the hysteria last year was that the people did not have enough confidence in the wholesomeness of the food supply. This calls on the industry to be extremely understanding of the proper knowledge and we have to lean over backwards to preserve always the climate of confidence running both ways on a regular basis.

DR. PALS: Consumer confidence is certainly one thing which we cherish. If there is anything that riles me up fast, it is some attempt to break this confidence. At the time of the cranberry incident last fall, we were asked whether we ever condemn anything. Those of you who are meat packers know that this does happen occasionally. About 107,000,000 animals came to slaughter last year and approximately 7 per cent of them had some condition which required that they be retained and a part of them, at least, condemned. I think when we keep that kind of information in the right channels, consumers will be confident they are not going to get any of that product which ought to be condemned. This becomes a rather staggering amount when you add it together, because each working day our inspectors find it necessary to condemn about 1,000,000 lbs. of product. That is a challenge to everyone, from the livestock breeder on down to the research worker, drug producer and everyone else along the line. Each has one aim, to reduce the amount, and we can do this only by all working together.

DAVIES: I would like to comment a little further on that. When I mentioned the fact that the press showed a sense of responsibility, it was in this area. We were reluctant to discuss the amount or number of pounds of meat that are condemned every working day, but when the question of confidence came up it was necessary that it be brought out to assure the responsible officials in government who were far removed from meat and agriculture. I think their confidence immediately was re-established in meat to the extent that they did not know this.

DR. DARBY: I would like to agree, for purposes of emphasis, with two points that have been made—first, the desirability and the benefit of frank, honest, intelligent presentation to the American public of the facts of our industrial effort. About six or eight years ago we first started a compilation to which I referred earlier, known as the "Green Book." It is a compilation of additives, as far as we could obtain information on in the Food Protection Committee concerning them, which were either being used or had been used or had been proposed for use. It was not an endorsement of these additives. It was an effort to try to present to the public, not broadside to everyone who reads the *Police Gazette* but to the interested, informed public and the informed lay and professional groups, something of the picture of use and the reason for use of additives in foods.

When this compilation was completed, it was proposed that we publish it. We had one tremendous amount of opposition within the liaison panel of the Food Protection Committee, or at least a part of the liaison panel. There was serious doubt as to whether it would serve a useful purpose to publish this and make it widely available. There were those who felt strongly that it should be published, and they ultimately convinced all of us that it should be. Within less than six months after publication, the "Green Book" was one of the most enthusiastically received documents that we have ever presented. Even those who had had serious doubts as to

the merits of publishing it found that it did allay a great deal of feeling when it did appear and people said, "Here is what we are doing, and this is why we are doing it."

To me this is terribly important for us to continue. I think it is helpful in combating the cultism and faddism and the irresponsible members of our society who accuse industry and agriculture, and sometimes other organizations as well, of plotting against the good of the American public whenever they use chemicals.

I think it would help if the public could understand what is being done, why it is being done and where it is to their advantage and if they could realize that chemicals, as we are discussing them here, are being considered and used in a totally different way from the previous concept of chemicals in foods. If we go back to the days of the Harvey Wiley campaign, we realize that Harvey Wiley, who did this country a tremendous service, was concerned with what one might call the misuse

PROFIT planning and operations control are discussed by Herman C. Heiser of Lybrand, Ross Bros. & Montgomery at accounting session on Saturday morning in Crystal Room of Chicago's Palmer House.



of chemicals—misuse such as Dr. Pals referred to in his talk. Dr. Pals indicated certain regions where chemicals might be safe but would not be permitted to be used—where they hide an inferior product, for example; where they serve to deceive the consumer; where they would cover up faulty and unsanitary practices of preparing food, and so on.

If we realize that the public's attitude has been conditioned in the past by this earlier misuse of chemicals, and when members of the public hear the word "chemicals," they immediately go back to that period—at least as they did until this area of discussion helped to educate them—then I think we can build on this true concept at present, a concept that has been developed by responsible industry and responsible agriculture and responsible government. I believe then we will get rid of the major part of misdirected efforts and ill-conceived regulation.

However, I must say there is a fringe of the public (and sometimes it is a fringe of the professions) which is so biased and so prejudiced and so unscientific that it will be hard to convince. I think we can identify this fringe with a number of types of food faddism. Their concept is that natural foods are God-given and, therefore, are better than anything else, that anything you do to a food must make it a poorer product. This is a concept that we know is not true, but they believe it. They believe that scientists are people who perhaps are just destroying the works of God. They believe that organic fertilizers are something that have particular virtues because they occur in nature, and that nature has powers which man can't understand, and so on. You know the group to which I am referring. If you examine their various discussions, you will find that they always seem to group themselves together, and they group their concepts together, and all support the same concepts.



New Meat 'Sell' Should Replace Cold, Dead 'Here-It-Is' Approach to Merchandising

William T. Snaith, president of The Raymond Loewy Corp., reviews supermarket study preceding special study for AMI.

I TAKE my place here with a humble sense that I will shortly become one more in the long, historic parade of those who have said unkind things about the meat business. But this time, for a change, you have asked for it. We do not come to you as authorities on the meat business. We do not consider that we know something about retailing.

While we intend to be critical, there is one big difference between our point of view and that of your previous assassins. Our criticisms, like our recommendations, are intended to help you make more money, not less. We want consumers to trust, not distrust you. And even more, we want food retailers—which means largely today the supermarket chains—to change their present attitude toward you. In some cases the opinions we received from retailers indicated that the speakers were sufficiently annoyed with your methods to be looking into ways and means of reaching around behind you for their meat supply—to the feeders and even the producers of cattle.

We have no intention of trying to scare you, but the fact that your customers feel this way even in a moment of irritation is significant. After all, you supply them with a product they have to have—a product on which they make millions of dollars every year; a product which by their own account is the very backbone of the modern supermarket. When these fellows get so mad at you they want to reduce you to the status of mere slaughterers whom they hire by the day, we have no doubt of your ability to defend yourselves, but wouldn't it be smarter to find out what causes this bad feeling and remove it?

The fact is both you and the retailers have problems with the ultimate consumer, and they are real problems. I think you will understand why we say this if you will let me review briefly the criticisms we made of the supermarkets' meat operation at the session of the Super Market Institute in Miami last January. Our analysis made some of the supermarket people mad, but it also produced a lot of discussion and a lot of action, and some progress. We believe the problems of your industry are so closely connected with those of the retailers that our report will have almost as much significance and value for you as it has for them, perhaps even more. In any case, some of your problems are identical with theirs, and in the long run you will have to work together to solve them.

MOST IMPORTANT DEPARTMENT: What did we tell the supermarket people? For one thing, we confirmed—from consumer interviews, psychological tests and by talking to supermarket operators and meat buyers—one very important fact: The meat department is the most important department in the supermarket. The question of meat quality, meat freshness and cus-

tomers acceptance of a market's meat department is the biggest single factor in the selection of a supermarket except for location.

We asked women, "Why do you shop at one supermarket rather than another?" Most of them answered, "I go to so-and-so's because they have the best meat in town." Do the supermarket operators know this? Nine out of 10 of them told us that a store's ultimate success or failure depends on the quality of the meat department. The meat buyers confirmed this. But neither the operators nor the meat buyers know how to win customer acceptance of a meat department if they don't have it already.

We asked the operators, "Who's got the most popular meat department in this neighborhood?" Many of them answered frankly that it was a competitor. But when we asked the next question, "What does he do that's different? How does he keep his reputation for meat popularity?" nobody knew the answer—neither the operators nor the buyers. So we set out to find it.

We examined the meat departments in hundreds of supermarkets. From a merchandiser's point of view, almost everything about them is wrong. For example, though meat is such an important item in the customer's mind, the meat department generally has the lowest level of presentation in the store, that is, the smallest amount of excitement or sell. In many stores there is no high-up indicator to locate the meat department. In almost all of them, the meat itself is displayed in a long, cold case, sanitary but unappetizing, often as much as 100 linear ft. of cellophane-wrapped packages, with nothing to describe or sell them except a price tag stamped out on a cash register, stapled onto the package.

What does this meat department say to the customer? It says, very quietly, "If you want meat, lady, here it is." But, we told the supermarket operators, this isn't the way to sell meat, or potatoes, or bread, or soap or anything. The way you sell something is to present it, display it, point at it, highlight it, shout about it! In short, you don't just say, "Here it is," but "Hey, look what we've got!"

CONSUMER IS SCARED: You may ask, as the supermarket men asked, "What makes you think all this sell is necessary? Our customers have to have meat. Why break your back selling it?" To answer that one, we investigated the minds of our consumers, and to put it briefly, gentlemen, the consumer is scared. The average shopper has no confidence when she buys meat. She thinks she may be buying a pig in a poke. The reasons for this lack of confidence are extremely important to the supermarkets and to you.

The average woman today is extremely ignorant about meat, more so than in the past. As incomes have gone up and more kinds of meat have become available to

more families, women have been faced with new problems—problems their mothers didn't train them to handle. A poor family 30 or 40 years ago took the cheapest cut of meat in the store, stewed it a long, long time to get the toughness out of it, and that was that. Today, the daughter of that same family, running her own household, can afford any piece of meat in that long, 100 ft. of counter space, and she doesn't know which is which. She knows this is a chicken and that's a lamb chop and a rib chop, a flank steak and a rump steak, a T-bone and a sirloin, top round and bottom round. However, what is chuck?

In some supermarkets, the meat is marked—sirloin, chuck and so on—but if a woman doesn't know what chuck is, and how to use it properly, if she doesn't know why the sirloin is better than the chuck, the information is of no use to her. "Which should I buy," she wonders, "a shoulder of lamb, a leg or a breast? What's the difference between beef and veal? Ain't it all cow? Or pork and ham—it's all pig!" Not only does she not know which is which, but she doesn't know how to cook the different cuts or what the end product will be. Suppose she and her husband have been out to dinner in a restaurant and had a nice helping of roast lamb. How does she go about reproducing it at home? Does she buy a whole leg just for two people? Or maybe her family has six hungry kids, and she doesn't know whether a leg of lamb is enough. And how should she cook it? Stew it, fry it, boil it? Roast it. All right, how long should she roast it? She doesn't know the answers to any of these questions, and that is why the housewife of today has reason to be scared.

NO INFORMATION: The reason she doesn't know the answers is because the fellows who run the supermarkets don't give her any information. In the old days, the butcher used to give the shopper this kind of information—the difference between cuts, how much to buy, how to cook it, for how long and, sometimes, what to serve with it—but the supermarket has got rid of the old-time, friendly butcher who gave the shoppers confidence in their meat purchases. Our investigation found that the butcher not only gave the shoppers information and reassurance, but he also became an authority to whom she referred if her judgment was challenged at home. She defended him from criticism, as she would not dare to defend herself. "My butcher recommended it, and he never lets me down," she used to say when she had a butcher to depend on for information.



HAWAIIAN girl bedecks the guests at the annual dinner of American Meat Institute on Monday evening.



DISCUSSING Loewy Report after Monday morning session are (l. to r.): L. H. Schnuth, advertising and sales promotion manager, The Rath Packing Co., Waterloo, Ia.; W. W. Jennings, vice president in charge of marketing at Rath, and Maynard Waxenberg, vice president of Eagle Food Centers, Inc. Palmer House Grand Ballroom was filled to capacity during the Loewy Report.

If she doesn't have a butcher, however, if she's picked the meat off the unattended counter, marked Prime or Choice, 3 lbs. for \$2.46, and her husband criticizes it, what does she say then? She says, "That lousy supermarket." And if it happens often enough, she'll quit going there. She doesn't know anything about the distinction between Prime and Choice. Why should she? According to Webster, both mean "the best." How does she know that you fellows got together 100 years ago and decided that Prime would mean best and Choice would mean second best?

The successful merchant today talks to his customer in the language she understands, tells her the things she wants to know. Imagine an auto showroom with no cars in it, only a long line of engines on bare chassis. Suppose such chassis had a label that said 19 B, or 32 C. The manufacturer knows this means one is a sedan and the other one is a convertible, but the customer has no way of finding it out. One car is marked "Swell," which the manufacturer knows is his top grade; the others are marked "Dandy." The customer can't possibly guess this means the second grade. The customer doesn't know what the complete car will look like, how many people can ride in it, how fast it will go or how much gas it will burn. There's no further information on the tag except the price and no salesman. If that's the way auto salesrooms were organized, America would still be walking to work every day.

BELL NOT ENOUGH: Perhaps you think this analogy is extreme, but it's pretty fair. Some supermarkets claim, for instance, that advice and special service from a butcher are available. They provide a bell. Just push the button, the idea is, and the butcher will come out and give you his attention, answer your questions, give you a special cut if you want it. Our researchers found this was not good enough. Women are reluctant to push that button. They feel they may be interrupting the man's work. They don't want to make a nuisance of themselves. They want the information and the reassurance, but they don't want to make a federal case out of it. They want somebody right there in plain sight so they don't have to yell.

Even a butcher would not be enough. The supermarket meat departments need exciting, colorful, appetite-appealing displays of what the finished product will

look like. They should give customers cooking information, quantity information, storage information, answering such questions as: "How do I cook it?" "How many will it feed?" "Do I need to buy the most expensive cut for all those people, or will a cheaper cut be just as good, if I cook it differently?" "If I'm not going to use it until the middle of the week, will it keep in the refrig-

multi-level fixtures. These fixtures depend on a new technological development, a refrigerating device which produces a horizontal curtain of cold air from vertical fins at the side of the case. By mixing up these two-level and three-level cases along the length of the counter, we would break up the unattractive monotony and linearity of the display and have a mechanism



PACKERS from St. Louis, New York and Baltimore meet (l. to r.): C. D. Bittenbender, T. E. Schludenberg, W. G. Hupfeldt, Fritz Groen-veld, L. L. Joslin, J. Krey Stephens and John F. Krey exchange greetings and smiles.

erator or must I put it in a freezing compartment?" A great deal of this information can be printed on a package. It's not necessary to have a butcher answer every one of these questions about every piece of meat on display, but somehow the information must be supplied.

There are other considerations. All of them have only one main purpose—to sell meat. For instance, that long, linear display counter is not conducive to browsing, comparing—the leisurely kind of shopping a customer is entitled to when she is making the most important decision of her shopping day. If she stops to think, she is run over by the meat shopping cart. If she goes back to look at something, she has to buck the tide. And remember, the money she spends in the meat department is high-ticket money compared with her other purchases. She is entitled to have a chance to think and compare, undisturbed, and if she gets it, she will spend more money.

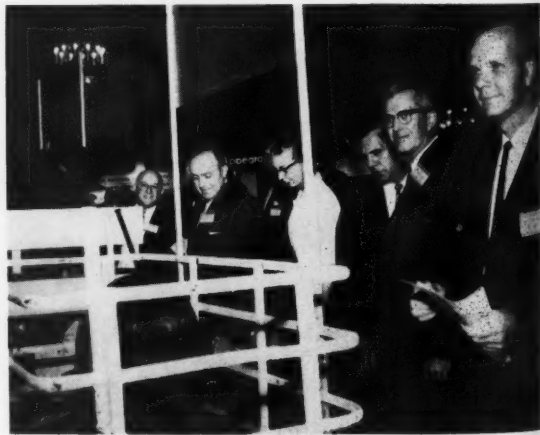
NEW SHAPE: What's the answer? We think there should be a different kind of shape or design for the meat department, new and different fixtures. Obviously, if you stand in the middle, surrounded by meat, you can see and compare without walking a mile. If there are two or three shelves of meat instead of one, and if the cases are arranged in a U-shape, just as much meat can be displayed as in a long narrow fixture, but it can all be seen at once.

The average meat department of today is at the back of the store, with the dry grocery gondolas right up against the long meat counter. The theory is that a woman shopping the dry grocery aisles will be thrown back into the meat department over and over again, but in fact this is not the way most women shop it. They want their meat first, and they want all of it before they start on the groceries and produce. The result of the present plan is that not only is the customer jostled by other women shopping the meat department, but she also is likely to be bowled over by others who come barreling out of the grocery tunnels. Furthermore, she is distracted from her consideration of the meats by the end displays on the grocery gondolas. That's how it is.

Some of these objections can be taken care of, without altering the floor plan, just by adding some simple new

which helps give importance and excitement to various categories of meat. These units can be used to display either the present meat categories, or better, to display end uses of meat—that is, to show the customer what it will look like when it's ready to serve at her table. Why divide meat up into beef and pork? Why not arrange it in terms of small family versus large, or meats for an occasion versus meats for every day? At Miami we showed the Super Market Institute people considerable further development of these ideas, including changes in floor plan.

Next you will hear a report on some of the material we have collected since our assignment by the American Meat Institute. This preliminary survey was conducted by a group headed by Dr. Herbert E. Krugman, who is chief of research projects for our organization. He will make a report of the findings.



RECEIVING visitors at hotel's "pen house" is Smoky the hog. Attention of AMI conventioners leaves Smoky undisturbed. Although hogs are considered to be photogenic animals, Smoky was generally uncooperative and invariably turned his rear to the cameraman for pictures.



Shopper Is at Sea in Self-Service; She Doesn't Trust Meat Quality

Dr. Herbert E. Krugman, director, market research, The Raymond Loewy Corp., tells why price has become rudder.

YOU HAVE commissioned us to take a careful look at your industry and to suggest how your industry might do its part in making the merchandising of meat more effective. In the past three months, we have participated in meetings with the AMI staff and with representatives of your committees. We have interviewed meat buyers and consumers. We also have evaluated a great deal of consumer research that has been collected over the years by your Institute. We were not assigned to do a comprehensive study, but out of our review we have developed some fairly strong impressions about your industry.

The consumer—the meat shopper, the American housewife—is a funny animal, but like other breeds she is changing (not too much we hope) with the times and developing new characteristics or the potential for new characteristics. Most of today's housewives learned to buy meat in the days of the butcher shop, when dependence on the advice of the butcher was widespread. Today the situation is different, and the housewife is confronted with the problem of judging quality by herself. This is no easy task, especially since meat grading, even if understood (which it is not), is no guarantee of flavor or tenderness. Moreover, one of the criteria of tenderness which is used with some degree of consistency—fat and marbling—is obstructed somewhat in this country by a “keep thin,” anti-fat bias. That is, the consumer hears with one ear that to get a tender steak she should choose one with fat in and around it. Yet, with the other ear she hears that to avoid overweight, cholesterol or heart trouble, she should avoid fat.

The old-time butcher was reassuring in some very subtle ways. He was not necessarily a good judge or provider of quality, but he was a man and the housewife was buying meat for a man—her husband. Furthermore, if the meat proved unsuccessful, he, the butcher rather than the housewife, could serve as the scapegoat, and he was the one who was going to be scolded when the housewife came in again.

It should be emphasized that the housewife is not going to blame herself if her husband ends up with a poor steak. Our own recent interviews, designed to go a little further than the research we have reviewed for you, suggests that today's housewife will give 70 per cent of the credit for a good steak to the steer, itself, and only a small portion of the credit to her ability as a cook, the seasonings she uses, the way the meat is cut, etc. Therefore, if she does not get a piece of meat from “a good cow,” as she puts it, the supermarket is going to get the blame. How is the supermarket going to be scolded? Who does she talk to? She doesn't. It's too impersonal, so she goes to another store and maybe she “gets even” by refusing to pay a penny more than

the amount that seems to her like a good price for meat.

BETTER GET TOGETHER: Even the housewives we talked to who hadn't the foggiest notion of the difference between Prime, Choice and Good meats could tell you the prevailing prices per pound to the penny. So you and the supermarkets are in the same boat together, and you'd better get together.

Can you bring back the old-time butcher? Probably not on a large scale. Such service is inefficient and expensive, and many women are able to enjoy the relaxed slacks and hair-in-curlers atmosphere of the supermarket primarily because they do not have to deal with store personnel. Can you teach the housewife how to judge and prepare meats, and in a much wider variety of meats than she now uses? You can give meats more status, especially some of the parts which are now less popular than steaks. You can sell more of the animal at better prices and give the supermarket something to sell other than price.

Can you do away with quality grading and perhaps replace it with classifications based on method of preparation? No and yes. You probably have to keep quality grading as a degree of reassurance until real uniformity is developed. Once you have real uniformity, packers' brand grading can for the first time take precedence, as well as the chains' grading. Meanwhile, however, you can add method-of-preparation classifications, such as meat for stewing, meat for roasting, etc. You can also help housewives shop for quick-cooking meals and long-cooking meals, big meals and short meals. Many possibilities are open for development if you will think of the end uses of your product and get behind model stores, pilot programs for the future, prestige promotions, new equipment and new merchandising excitement for meat on the table.

You need not embark on massive campaigns of national advertising, but you can pick and choose key projects which will make news and earn respect. As a philosophy we recommend to you the experience of the turtle, about whom it is said, “He only moves when his neck is out.”

INCREASE CONFIDENCE: Where would you begin? One obvious problem is to increase consumer confidence in meat products. Consumers are still wary of the “other side” of the meat, the one covered by cardboard; they still talk about doubled up pieces of meat. Obviously, there are packaging and labeling possibilities here.

A consumer advisory group recently had this to say about hamburger meat: “Informative labeling should include the fat content. (Label would clearly read: ‘Hamburger, not more than 30 per cent fat,’ or ‘Ground round, not more than 10 per cent fat,’ for example.) And any ground meat product containing pork should be



PANELISTS who discussed the Loewy report on the last morning of the meeting included J. C. Mommsen, vice president of sales for Armour and Company; N. L. Chaplicki, vice president, National Tea Co., and James Stimpson, National American Wholesale Grocers' Association. W. T. Snaithe, president, The Raymond Loewy Corp., and Loewy's Dr. H. E. Krugman, also participated.

clearly labeled (as: 'Contains raw pork, should be cooked thoroughly before eating')."

We would stress the peculiar significance of labeling for the supermarket. To quote from one of our consumer interviews: "Supermarkets are wonderful for canned goods, because you can read the labels without being under pressure." This quotation is, of course, double-edged. Meat is not labeled as informatively as canned goods, for one. And second, when there is a "meat special," there's likely to be a tense, pushing crowd around it.

Of course, at other times, the store has "run out of the advertised special," and those consumers who come late are, at a minimum, disappointed; at a maximum, plain mad. To quote another of our consumer interviews: "Nothing disgusts me more than to see only two or three packages left in a big empty space where the special was supposed to be."

All our problems are essentially problems of consumer confidence. The fact that there are so many meat specials is only testimony to lack of confidence in quality. Every time a consumer finds that an expensive steak turned out to be tough, she is more likely next time to buy on a price basis. Here's a quote from one such person: "I might just as well have bought a cheaper one."

Everybody is price conscious with meats, but they are more aware of prices at the top of the line. "Good" grade beef has almost become poor beef by comparison. In our interviews, only about one out of six consumers couldn't tell us the local price per pound of Prime; two out of six couldn't tell us the price of Choice (about 2¢ per pound lower), and three out of six wouldn't hazard a guess about the price of Good. Of those who did give estimates, there was very little variation from consumer to consumer for prices on Prime or Choice, but estimates on Good varied all over the lot. The moral of this story is that consumers seem to buy Prime and Choice on sale so they know just how much of a bargain they are getting. This is their reassurance. Incidentally, about 80 per cent of the estimates ended in nines. I've heard block beef called a football item, but this sounds more like baseball.

PICTURE WILL CHANGE: The price and quality picture is going to change as our nation becomes more affluent. In Miami when we made our report to the Super Market Institute, we said that one of our recommended changes was to give the consumer the opportunity to enter a supermarket not with a skeptical "What's good today?" attitude, but to make everything look so good that she would enjoy the pleasure of shopping for what she wanted. We also said that as income went up there would be more interest in better grades of meat. What about prices, though?

So far as we can see, the evidence suggests that impulse buying in meats is more characteristic of the

lower income groups, but on a price basis. For example, we asked a national cross-section of 1,600 consumers in which section of the supermarket they were most likely to pick up items that they didn't think of before going to the store. On a national basis only 10 per cent mentioned the meat department (groceries were mentioned twice as often). However, the percentage who mentioned meat went up 8-9-13 per cent as we went down the scale of income from upper to middle to lower. In short, the more affluent consumers—of whom there will be more in the future—seem more likely to plan their meat shopping. They are more likely to know what they want and, while they may or may not want to pay more, we think they will be more willing to go out of their way to patronize the store that satisfies their needs. According to a recent MRCA survey, upper income housewives do "shop around" more often.

Does this mean a return to the old-fashioned butcher shop? Certainly in our SMI report, the layout and merchandising features contained in our new approach to meat departments attempt to bring together some of the best of the old with the best of the new.

Our consumers say: "You can't complain or bring back anything at a supermarket; you just put up with it." "If what's out doesn't look good, I won't ask. I will just skip it that time." Or ultimately, "I still don't think there's anything like a good old reliable butcher shop that handles the best quality meat, where you go and get exactly what you want."

These remarks suggest the personalized attention of the butcher, something which to some extent is being provided, but with our new U-type layouts can now really be highlighted.

FRESH MEAT WANTED: There are other things about the old-time butcher, however, that can be successfully brought back without him. For example, we noted in our interviews that when we asked consumers to describe an ideal supermarket meat department, over and over again there was included, although not emphasized, in their reaction some remark like: "I like to see lots of crushed ice around." "It should look cold." "I like it when my hand can feel the coldness of the counter." These comments brought to mind our memory of the butcher. He wore a straw hat, a coat, sometimes a sweater and even gloves, and when he went in the back and the heavy cooler door slammed behind him, you felt that it must be 30° below inside. This means fresh, fresh meat.

Now, let's talk a bit about technology. As you know, there is a great deal of current activity in the development of tenderizers. Some developments seem to promise, in several years, a real breakthrough. But if a technical breakthrough does occur, then a real service—degree of added value—should accrue to your product. It should, but will it? That is, will you be able to obtain

a substantial price and profit return for your efforts?

The same question applies to prepackaged frozen meat. In time, there's no reason why perhaps 25 per cent of the consumer market could not learn to appreciate the virtues of properly frozen meat. You may say that one company tried it and failed, but from our observations, the consumers did not reject the item. They rejected the price. The reason they rejected the price was simply that in the overall picture of lack of confidence in quality, consumers have learned that the way to buy meat is on a price basis. This is something they have to unlearn, and you must be the teachers. Otherwise tenderizing or any other specific innovation may never be able to command the price to which it is entitled.

ANSWER IN ATTIC: This is the big question. You may ask, is it possible really to substitute confidence for a price orientation? Let us answer that question by showing you something we found in your attic, that top floor of your house where you store the accumulated bric-a-brac of bygone years. One of the things we did in this job for you was to pull together all the vast research on meat that we could find. In the process, we visited the offices of Elmo Roper, who, over the years has done periodic public opinion surveys for you. Of course, most of these were public relations surveys, but Carolyn Crusius, one of Roper's partners, remembered a survey that she thought might be of interest to us. It wasn't in the firm's shop; it was in the warehouse, or attic, if you will. It had been done 20 years ago. It took a week to find; there was only one copy; the pages were a little worn. What was it? It was research on the firing line; customer meets butcher, the old-fashioned butcher, the kind we refer to with so much nostalgia.

In this study, Roper stationed observers at 150 butcher shops and had them tally off the kinds of comments that went back and forth between customer and butcher. A total of 4,736 customer-butcher meetings was recorded in this way. Here's what the Roper study found. First, 51 per cent of the butchers made an effort to cultivate the customer; 49 per cent did not. About half and half, but when we take those who did and those who did not cultivate the customers, we discover the following facts:

First, the customers who dealt with butchers who did not make an effort to cultivate them were more likely to turn down an item on a price basis. That is, in 34 per cent of the contacts between a customer and this kind of butcher, she asked about the price and then said "No." With the other kind of butcher, the one who made an effort to cultivate the customer, this happened only to the extent of 22 per cent. Second, and equally significant, when a customer did buy an item from a butcher who did not cultivate her, his volunteered advice on quality figured in only 5 per cent of the sales. With the other kind of butcher, the one who made an effort, this figure tripled to 16 per cent.

This does not seem to mean that a customer buys or doesn't buy a particular item because the butcher does or does not give advice on quality. It does seem to mean that when the customer comes to a butcher who typically provides her with advice on quality, she is less likely to ask him about price, or especially then to turn down an item on a price basis. There's your old-fashioned butcher, and there's some documentation that you've had in your attic for 20 years.

MENTAL PICTURE: Now, let's turn to something more basic. We said before that consumers had learned to buy on a price basis. There is, however, something else that they seemed to have learned; this is, a mental picture of the kind of steak they want. Research does suggest that there is such a picture, but does it bear any

relationship to grade or to taste satisfaction? Let's see what information there is on these two questions:

1) Do better grade steaks look more appealing than lower grades? In 1956 the Agricultural Experiment Station of the University of Missouri showed 1,500 shoppers displays consisting of Prime, Choice, Good and Commercial grade steaks. The grades were not labeled. Each shopper was asked which of the four steaks he or she preferred. Prime was chosen by 32 per cent; Choice by 24 per cent; Good by 22 per cent; Commercial by 15 per cent.

2) Do better grade steaks taste better than lower grades? In 1958, the same group had steaks cooked and served to groups of judges. Typical of the results is the fact that 51 per cent were able to report some taste difference between Choice and Commercial (49 per cent could not), or that 58 per cent were able to report some difference between Prime and Good (42 per cent could not taste any difference).

These findings suggest only a very slight relationship between the looks or the taste of steaks and their grades. Perhaps there could be a set of homogeneous grades developed. At present there is none. The same experimenters found that 44 per cent of their samples could not name a single federal grade name. They also asked their respondents this question: "Do you think that there is enough variation in the quality of beef that you buy that it would often be helpful to you to have the recommended cooking method and time printed on the label of every package of beef?" About 50 per cent said "Yes," but when asked if such information would be useful to other people, the yesses jumped to 75 per cent. This 75 per cent, without the ego factor, is probably a better estimate of the true need.

All in all, perhaps the most interesting remark made by the University of Missouri experimenters is: "Most consumers appear to be much more interested in the attributes per se than as indicators of tenderness or other non-visible eating qualities. This is, not too much fat, a good color of lean, and a small amount of bone were generally desired, though consumers often had different opinions as to which of the different grades had these characteristics."

ODD SITUATION: If we can take this remark literally, it leaves us in a very odd situation. It seems to say that consumers know the looks of the steak they want. They have a mental picture of what they are looking for. Unfortunately, there is little relationship between this picture and the grading system on the one hand, or the eating qualities on the other. Obviously, this picture of what a good steak looks like doesn't help them very much at all. The only recourse is for you to tell them what a good steak is, and if you don't know (e.g. what makes a good flavor) then you will have to find out.

William Snaith earlier read you some rude remarks made about you by retailers. I have a few more we think are important.

Throughout the buyers' comments, one word keeps cropping up time and time again. That is the word "honest." They talk about honest weight, honest feeding, honest hams. Yet, when they are through voicing their suspicions of the packers, they are also likely to admit some sympathy for the packers, and at least a small amount of hope for the future. Here are a few sample quotations:

"Yes, it's a rough business dealing with packers. But we do make verbal contracts. In this respect, it's a very honorable business." "They work on a very low margin and don't have the money to establish their name." "They tried to be competitive with a cheaper product

and put their label on crap. But I think the picture is changing." "Now they assign a plant to a buyer and will select cattle for what the buyer wants. It's a new trend. It may be quite successful."

What would they like from you? What are their specific complaints? Well, of course, there is the big one of uniform guaranteed quality. But underlying this, and more specifically, what are the policies and practices that could help or hinder your relations with them?

First, there would be the simple matter of ethics, or a policy of NO DEALS. Here's a typical complaint: "I once had a lamb promotion, and a top packer suggested I buy top and good, and they'd label it all top."

HAMS ARE HIT: Second, there is something that might be called LAY OFF THE CHEMICALS. Here are some quotes: "Our cattle are fed more honestly. That means they don't get as many antibiotics as weight builders. It also means that they don't exude the kind of gluey moisture that destroys the meat package several hours after it's put on the shelf." "An honest ham is only

cent. Some take $\frac{3}{4}$ or 1 per cent in jobbing houses. I battle with many shippers." "They should do research on shipping cuts out in good shape. It comes to us with parchment on it, and we have to beg for that. What do the beef rounds, loins look like? We had to beg them to cover the eyes and exposed parts that were cut..."

LET RETAILERS KNOW: These are just samples of complaints, and maybe some are beyond your control. But while we know that many of you are trying to improve these situations, do the retailers know it? For example, do they know you have worked on the nomenclature of hams and have recently developed a pamphlet on how to select and cook ham? Do they know that you are currently sponsoring a study of consumers' reaction to blandness in hams? Do you sit down together often enough so that they can know these things and understand what is involved in your efforts to satisfy their needs?

Then, too, there is the other side of the question. You couldn't very well be criticized by some retailers



WEARING their leis, guests stream into the annual dinner of the American Meat Institute, held in the Grand Ballroom at the Palmer House on September 19. The Hawaiian theme was carried out in the decorations, but the fare was the kind packers like best—built around enjoyment of a hearty cut of beef.

3 per cent above green weight. Local pumpers have destroyed the market for hams. Big packers started doing it, too. I only buy from two outfits, which sell honest hams."

A third group of comments suggests **STRICTER LAWS**. For example: "Another sore point. The pickled hams. Nowadays all kinds of hams are thrown together in the case; ready to eat, almost ready to eat, etc. It's dangerous. The NCR label is too small for the necessary information. The 'ready to eat's' are no more ready to eat than I am. The packers should sit down with the government and redefine terms." "Hams have to be sold as honest weight. All hams should be thoroughly inspected federally. Pumping to 30 per cent should be outlawed."

A fourth group of comments concerns **SHORT-SIGHTED QUALITY**. For example: "There is a trend toward bland meats. It's the packers' fault. They have been using inexpensive spices rather than good meat to get flavor. As a consequence, the public has turned away from the spiced-up article toward the bland. But there is a market for good meat and good flavor."

Another group of comments concerns the desire for **MORE INFORMATION**: "They just buy what is available without trying to influence the source of supply. I'd like to know what's on feed. It's only been in the last year, and out of desperation, that the packers tend to influence reduced production on overfeeding of hogs."

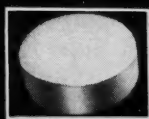
Finally, we have comments about the **CONDITION OF THE DELIVERED PRODUCT**: "In every contract with a packinghouse, there is fine print on the bottom concerning shrinkage. I never accept more than $\frac{1}{2}$ per

without other retailers encouraging you in some of the practices that the first group criticizes. This is no black-and-white question. There is grey on both sides. Retailers can be pretty tough, and you can be pretty tough. You are both old traders and you ought to be working on the solutions to some of your specific problems together.

Some of these problems are similar to what we have seen in other industries; some are perhaps unique to you. You add value to your basic product, primarily through labor alone, and you make little money on its sale. Occasionally you make lots of money, but for short periods only. Yet hundreds of small packers with little more, as you say, than "a rope and an axe" have been glad to go into the business for the sake of the return on investment. They do this despite the fact that the American consumer acts as though there are three, not two, certainties in life, i.e., death, taxes and what they consider to be the high price of meat.

Your basic problem is clear enough. Every large and successful industry in the country, including canned and frozen foods, is based on a reasonable degree of uniform product quality. Yours is not—yet! The consumer is wary as she enters the supermarket, and rather than be loyal to any one of them, she may over a period of time shop in two, three or four stores to get the meat she wants. The store buyer is wary of the grade quality he expects to get and spreads his buying around so as not to be too dependent on any one of you. And both the consumer and the buyer, being unsure about uniform quality, fall back on something else as a basis

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for purchasing. You know what this is. It is price, pure and simple. Consumers consult advertised specials in the daily newspapers, while buyers consult the "Yellow Sheet." This is a commodity market and in a commodity market, where nobody trusts nobody, price is all.

Mind you, we are not talking only about the uniform quality of beef. We have heard plenty of comments about the variation, to meet local price competition, in the quality of processed meats as well. Supermarket buyers are not very impressed with the brand name value of these items.

SLAUGHTERER FOR HIRE? Can this situation remain as it is? We don't think so. In order to get uniform quality, some supermarket groups have gone deeper and deeper into the buying process, making sure they get the cattle they want. They get to know the feeder. They get more interested in the feeding process than in the killing. Little by little, they may leap frog your own operation, own or control their own packers, or just hire you for the slaughtering process. In short, the situation is not likely to remain stable.

What about you? Can you change the situation? Can you provide uniform quality? Going into producing or controlling the livestock is one possibility, but there is a basic change in attitude involved here which is perhaps more important than the particular way in which it is implemented. You are what we call production-minded rather than marketing-minded. Many of your plants are geared to excess capacity. You like quantity. It was the old tried-and-true way of making money. Your cattle buyers have more prestige within your companies than the sellers. You keep the two apart. You like to sell what you can buy rather than buy what you can sell.

Mind you, in this respect you are not different from some other industries. There is frequent conflict between the factory and the sales force. The people in the factory blame the salesmen for making agreements, delivery dates and prices that are unrealistic. The sales force blames the factory for not turning out the quality and features that the customers will buy. This can be a healthy tug-of-war when it is not too lopsided, but it can be more easily afforded in other industries where more value, through processing, appears to be added to the product.

Suppose you were marketing-minded rather than production-minded. What would it be like? Would you stand on your head, or so it might seem at first, and break the vicious cycle of price competition and mutual distrust? You would certainly have to get closer to your customers, the store buyers, and to iron out the mys-

teries and the conflicts of interest. As it is now, you wish they would tell you about their planned promotions earlier than a mere two weeks ahead. They, in turn, would like you to give them information on what the livestock supply will be like for the coming weeks.

WHAT IS NEEDED: You would have to make intensive efforts to find out what your customers want, show them how you plan to go about fulfilling those desires, and have your own buyers go out and buy accordingly, even if it meant initially taking a chance on paying higher prices. Presumably, if you achieved the trust of the buyer, he would be willing to pay a somewhat higher price for guaranteed uniform quality. He says he would, and perhaps says so in sincerity. But would he really be able to do so in the face of price competition? In the long run, you would probably have to take one more step truly to earn his respect, and that is to step a little bit into his field just as he has stepped into yours. He has stepped, or will step, into yours by attempting to know and select cattle rather than merely to select beef carcasses. You can step into his by taking the initiative in making his meat department more successful with his customers. This, of course, means that you really must understand his problems.

This does not mean that he would welcome your "help." The retailers say that it is their responsibility to educate the public, that it is their job to have and use the "know-how" of meat merchandising. Yet, as our SMI survey shows, supermarkets are not doing a very good job. Their meat departments, with a few exceptions, all look alike and are mighty dull at that. Suppose the packers showed their interest in, and appreciation of, the retailers' problems by providing along with their meat of uniform quality, the fixturing, packaging, recipes and point-of-sale promotion ideas that would furnish consumer excitement to the meat department.

Of course, you will say, some retailers or some groups within your own industry are doing this already, but how many and how much? Not very! Meanwhile, they needle you about controlling the feeders. We say that your best chance of gaining their respect is not just to respond constructively to their needling, but to constructively needle them a little in return. You can start something of your own; you can needle them by helping them see better ways of merchandising meat. You can take some responsibility for ideas in fixturing, ageing and so forth. After all; it's your product!

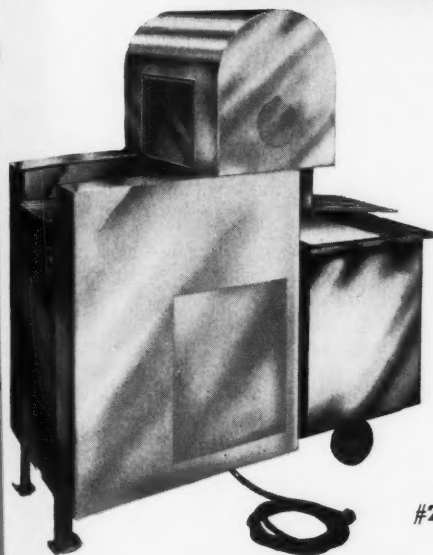
This is a bird's eye view of what we have found about your industry. Where do we go from here? For this we turn you back to William Snaith. (See page 140.)



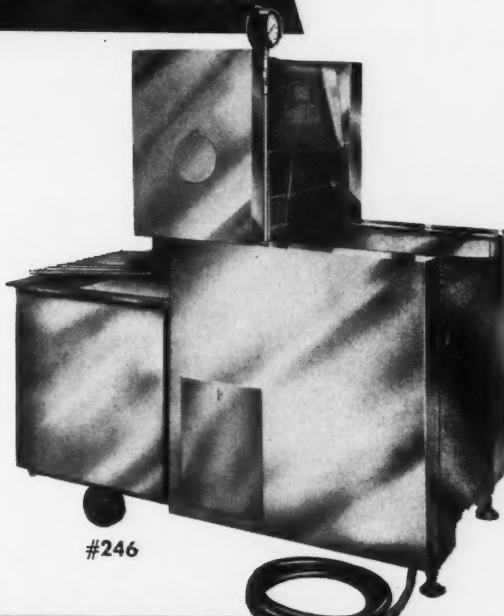
AUGGIE RING, SR. (right), sales manager of B. Heller & Co., Chicago, presents AMI 25-year service awards to members of the sales staff. Left to right are A. W. "Jack" Hart, Cleveland; Lon Cannon, Louisville; H. D. Brickl, Belvidere, Ill.; Frank J. Scholz, Newton, Iowa; Howard P. Kupp, Philadelphia, and R. L. Davidson, Peoria. The firm held a special convention dinner to honor its industry veterans.

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★ NO MOVING TABLE TO CAUSE MAINTENANCE PROBLEMS!

★ CURE 240 TO 480 BELLIES PER HOUR. COMPACT! PORTABLE!

★ NO WEIGHT LOSS IN CURING. CONTROL COLOR AND FLAVOR!

★ CURE MEAT IN 24 HOURS, OR LESS, WITH YOUR FAVORITE CURE!

PERMEATES

BELLIES FOR SMOKING AND DRY SALT-ING, BONELESS PORK BUTTS, JOWLS, BACON SQUARES, FAT BACKS, BONE-LESS PORK LOINS (CANADIAN BACON), TONGUES, BEEF BRISKETS, BEEF BACON.

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Boss Permeators are proven in performance . . . ideal for all cost-conscious operators. Stainless steel for easy, quick cleaning. A series of injections by stainless steel reciprocating needles perform the perfect permeation of pickle.

2 sizes available—No. 247 impregnates 240 bellies per hour—No. 246 impregnates 480 bellies per hour. A lift jack with 6" rubber tired wheels is avail-able for easy movement of Permeator.

FREE personal instructions are provided when Perme-ator is delivered, assuring perfect mechanical operation.



THE *Cincinnati* BUTCHERS' SUPPLY COMPANY
CINCINNATI 16, OHIO

Industry Needs to Get Together to Bridge Gap In Communications and Improve Other Areas

Eight-point study and action program is recommended in third phase of Loewy report, presented by William T. Snaithe.



WHAT is to be done? I assume we are in agreement that there are some steps which can and should be taken. We have some recommendations we want you to consider—some of them involving direct action now and some others which would require further research or planning first. Before we get down to our specific proposals, let me remind you once more what is the basis for our thinking. We are not here as experts on the meat business. We do not believe our brief study of your industry has made us authorities on it. We are here because we are experts in the art and science of retailing, and what we tell you is based on this knowledge and experience.

In Miami last January we spent three days with the Super Market Institute people—as intelligent a group of retailers as you could find in this country, which means the world. Many of these men have been personally responsible for the revolutionary development of the supermarket, which has become such a giant factor in our national sales equation. And yet we spent one whole day discussing with them the basic principles of retailing. Some of these principles are thousands of years old and go back to the earliest bazaars and market places, but they are still sound today.

A hundred years ago, the purchase of food by a consumer was a personal transaction between a customer and a storekeeper. The guarantees of quality were the shopper's own sharpness and knowledge, and the retailer's reputation. There were no canned or packaged goods, and if the storekeeper let the customer down too often, she'd take her business elsewhere—if there was an elsewhere.

Today, things are quite different. Most of the goods in a modern supermarket are pre-sold by national advertising. The customer doesn't ask the grocer if this is good soup. If she wants soup, or soap, there it is in a can or package she knows as well as she knows her own front door, and with quality she has complete reliance on. The enormous power of mass communications gives her the reassurance the retailer used to give personally 100 years ago.

MEAT'S ANONYMOUS: The problem of the meat business lies precisely in this new, changed situation. That is, the item which more than any other the customer wants to be good, fresh and delicious is the item which has the smallest amount of quality identification. Fresh meat has no familiar package, can label or identifying mark; no attractive color photograph of the finished product, ready for serving. There is no indication whether the meat comes from a nationally known packer or from an abattoir down the street. The customer can't poke the meat or pinch it, as she feels tomatoes and peaches. She knows nothing of how to judge meat by its appearance, and the labels on it are no help. Further, the consumer has to pay more for the meat than for anything else she buys in the store. And finally, the insuperable obstacle of quality control

means that, inevitably, under present circumstances she will occasionally be disappointed and pay a top price for a tough steak.

The result is real frustration for the consumer, who perhaps disappoints her husband, her family, important guests, and frustration, too, for the supermarket operator, who from this kind of an incident can lose a customer who may be worth \$1,000 or even \$2,000 a year in sales. Women do switch markets because of one bad steak, and while the one bad experience may be the culmination of a series, still, she's gone to another market and she won't be back. There is a further serious result from this development. Since the customer can find any way at all to tell the good product from the bad, she starts to buy on a price basis. As Dr. Krugman quoted one consumer, "I might as well have bought the cheap one." For the packer, this is a most dangerous development because whenever price becomes the sole criterion, the decay of the quality image has begun.

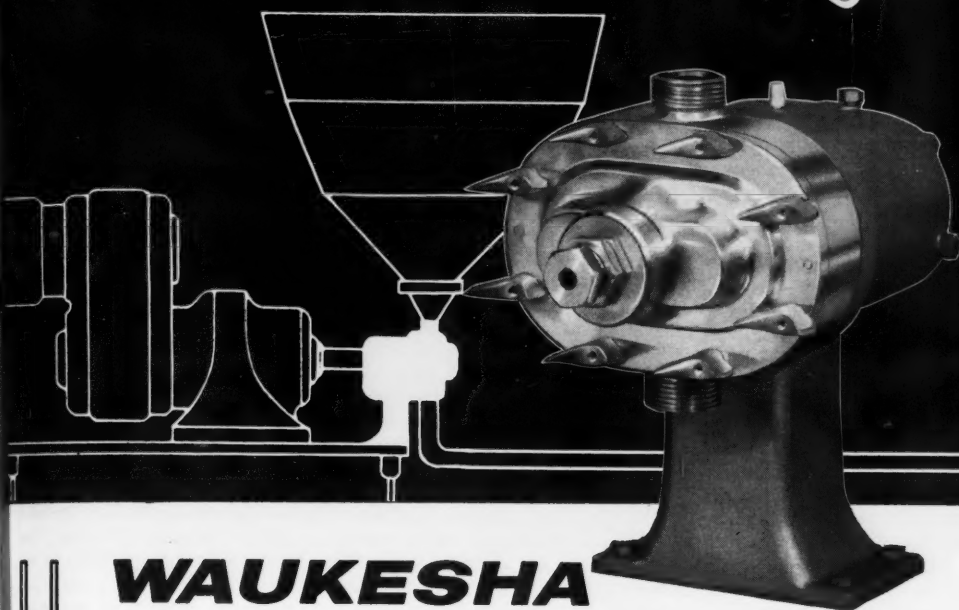
What can be done to improve this situation from the consumer point of view? First, *give her information*. She needs to know more about meat. She is falling into a rut from lack of knowledge. She needs to be reminded of the many kinds of meat that can be delicious and exciting, besides an expensive sirloin steak or an expensive lamb chop. It's not enough to mark it "round steak" or "chuck steak." She needs to be told, in a way that will stimulate her appetite and her imagination, that round steak can become the delicious and fashionable London Broil, or that chuck steak can become the delicious and fashionable beef bourguignonne. The same kind of information is needed about every part of the steer, the lamb, the pig.

TRIPE ELEGANTE: Expensive hotels buy block beef, whole lambs and pigs, and I am sure I am violating my confidences when I tell you the fancy hotels throw very little of it away. Every part of every animal is not only used in these elegant restaurants, but is used in an elegant way. Calf's brains, tripe, liver, kidneys, oxtail, shank of lamb, sweetbreads, pig's knuckle, short ribs, spareribs—there are few parts of an animal so lowly as which he can slap a French name and a hefty price tag.

The consumer must be given the kind of information that will lead her to use at least some of these different meats and parts of meats which she never even considers today. And if she is to use new kinds of meats with confidence, she needs many different kinds of information. She needs to know what the finished product will or might look like, what it will taste like, whether her family will like it, what she will tell her family it is—that is, a name that sounds attractive, like London Broil, but won't scare them. Beef bourguignonne is probably too fancy; French roast is better.

She needs, of course, to be told how to cook it, how much to buy for how many people, what grade of meat to ask for, what the federal grades mean. She also needs

50% faster stuffing time



3A APPROVED

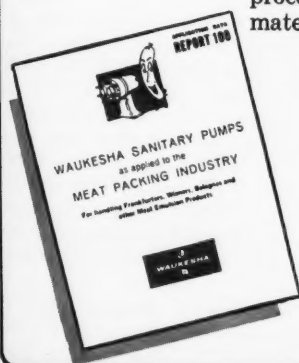
Meets all standards of Poultry Division and Meat Inspection Branch of U.S. Department of Agriculture. Also meets all standards pertaining to new food additive amendment of the Food and Drug Act.

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This Waukesha pedestal pump with *vertical* ports is automatically controlled at the stuffing horn. The same system can be easily modified to fit your plant; also, extensively used in the transfer of meat emulsion products. Tested and proved by leading meat processors from coast to coast. Let our engineers help you automate your stuffing operation for greater volume at less cost.



WRITE FOR APPLICATION REPORT 100

Here's a factual engineering report of findings in the meat processing industry. It graphically illustrates the transfer of meat emulsion products through a series of Waukesha Pumps. We will send this report to you on request. Ask for Report 100. Write:

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to know more than just the fact that federal grades start at the top and go down; she needs to know something positive about them, along the lines that some grades are cheaper than others because they have to be cooked a little longer. "But it's just as good," we must keep emphasizing. "The flavor is even better!" She will need information also on what to look for in different kinds of meat, that marbling is good, not bad, for instance. She will need to know a little about ageing, perhaps. She will certainly need to know how long she can keep a specific piece of meat before she cooks it, whether she has to put it in the freezing compartment or can just keep it in the refrigerator, and how long it will take to thaw it out when she gets ready to cook it.

Let me tell you what goes on in my own house. We were planning a big party and my wife bought an enormous turkey. The day of the party she took it out of the freezer and started to thaw it. Then she got a phone call. The guest of honor had the mumps and the party had to be called off. So my wife asked me—the big meat authority—"Can I cook it and then re-freeze it?" This is just an example, and my wife is a comparatively well-informed consumer.

There is, of course, a whole additional body of information the consumer needs in relation to so-called ready-to-eat and processed foods. Can you really take it out of the can and put it on the table? And if so, wouldn't it taste better if you didn't—if you added this or that, cooked it thus and so?

COMMUNICATION PROBLEM: All this is information the customer needs if she is to have the kind of confidence in meat that she now enjoys in dry groceries. If we can agree this information would be useful to her, that it would enable the retailer to sell her more of the animal and thus increase his profit margin and would also be helpful to you since the primary producer always benefits from increased consumer satisfaction, how are we going to get this information to her? This is a problem in communication. Bringing back the butcher is not the answer. It's too expensive and wouldn't be enough anyway. We are asking for information the old-time butcher didn't have. Some of it nobody has. A research program in problems of nomenclature is required, to find new and better ways to classify the different kinds, cuts and grades of meat. For example, classify by size of family, or by method of preparation, or by caloric content.

While these are being found and tested, research and experiment on labels and packages can be carried on. How much of this information can be carried on a package or label? What part of it will have to be incorporated in the display, or in printed material, recipe giveaways, special tie-up offers and so on? What part of it can be given out by meat department employees, employees who are not butchers?

Much of the information can certainly be included in improved presentations of meat, new kinds of display, new fixtures, new floor plans. The problem of showing what the final end use of an item will look like is obviously a matter of display, and we have plenty of examples from the frozen produce people on which to base a study—a simple light box in which color transparencies are mounted, for instance.

The fixture manufacturers, as we mentioned earlier, have a new technological improvement which could revolutionize meat display. The way meat is displayed in supermarkets today, it has to lie there in the case, flat, cold and dead. With this new development, a steak or a lamb chop can actually sit up and take notice. The new element is a vertical fin which produces a horizontal curtain of air, and this is what makes possible the

multi-level fixtures of which we spoke earlier. If it develops as promisingly as we hope, there is no reason why meat displays should not acquire almost the impact of a dramatic fashion window. We recommend that you undertake a research development program around this air-curtain fixture.

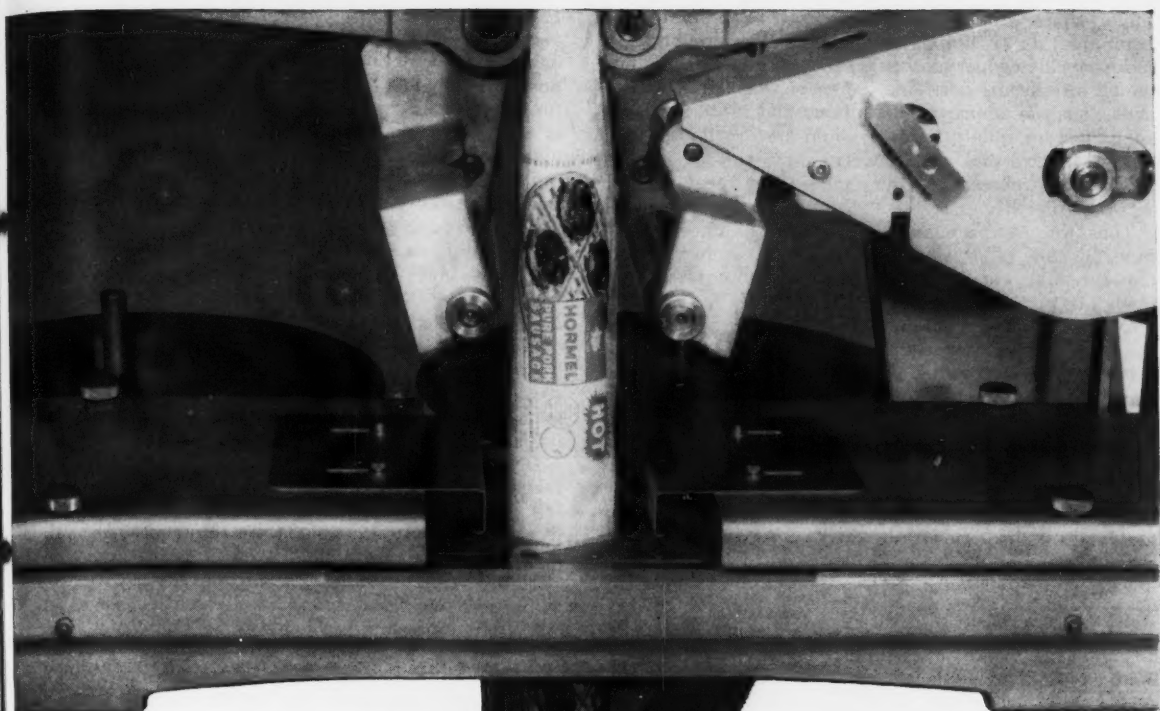
CONCERN ABOUT QUALITY: One more problem in consumer communication is that of the product image, which of course lies at the very heart of the whole business of consumer confidence. The consumer needs to be given a new kind of assurance that the meat packing industry is concerned about quality. Our researches have made it clear to us that, in fact, some packing companies have already embarked on large scale, long-range programs for the improvement of beef quality. We have no doubt that you will solve the complicated problems of genetics and feeding much more successfully than any group of disgruntled retailers who may decide to try it. But we feel that the consumer needs reassurance now and that a public relations program could be worked out to give it to her.

The theme, of course, would not be: "We know our meat is no good, but we're working on it." The theme should be that American meat is the best in the world and that research is making it better every day. It is not too soon to start planning ways to carry some kind of evidence of quality right into the supermarket meat counters. Establish and publicize industrywide standards. Develop an AMI stamp of quality which goes on every cut that meets the standards. Develop and publicize new programs for improving the breed of meat animals and poultry from the consumer's point of view. We are not a public relations company, and I am not going to try to outline a public relations program for you. But the old Madison Avenue saying, "Rain is no good without thunder," certainly applies in a situation where you are making strenuous efforts to improve, and the public knows nothing about it.

The retailers may know something about it, but you have problems of communication with them, also. The quotations you have heard about yourselves from retail sources suggest it would be worth a great deal to improve your relations with the retailers, who are, after all, customers, too. It is our impression that what is called for here is an all-out effort to convince the retailers their image of you is just plain wrong; that you are not a self-centered public-be-damned industry, but that you do have a real understanding of retailers' selling problems and do not regard them as mere automatic outlets for your product.

ACTIONS SPEAK LOUDER: How can you go about giving them this new picture? Again, it is a matter of communication, but as often happens, in this situation perhaps actions will speak louder than words. Since the retailers seem to feel so strongly about the problem of long-range future information from you—that is, they would like more advance notice of just what is going to be available—maybe you should start with an all-out effort to give them this, not with just talk and soft soap, but with a real change of operation. This would mean re-training your own salesmen, of course, explaining the purpose of the new policy, encouraging them to develop close, long-term relationships with the retail meat buyers.

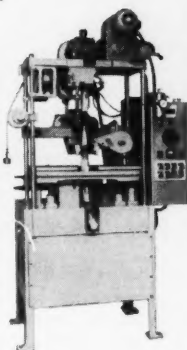
Some packers have already experimented with a system which assigns one plant permanently to one customer or group, allowing the plant to learn the actual week-to-week and month-to-month needs of the customer and "busting their buttons" in a genuine effort to supply these needs. That is, if the customer wants a certain type of cattle, which is not on hand, the plant



If it can be squeezed, this closing can clip your costs

Total cost of materials about \$4 or \$5 per thousand packages! Uses only 75 square inches of roll stock film and 1½ inches of coil wire for a one pound package... with NO WASTE.

Occupying floor space only 3 ft. x 4 ft., the chub machine takes low-cost roll film and heat-seals it into a strong continuous tube. Tube fills automatically as it passes over end of mandril carrying the product.



Such is the amazing economy of the new improved KP Chub Machine... the most efficient packaging unit ever offered for any semi-viscous product.

Electronic registry control "reads" the printed film to pinch off and close packages at proper point, simultaneously applying two clips made from low-cost coil wire. Completely automatic and fool-proof, with dependability proven over years of service and millions of uniform, skin-tight, clean, saleable packages.

Uses almost any film, printed or clear. Accurately meters 4 to 32 oz. packages, with capacity 2400 closings per hour. If you are packaging pork sausage, liver sausage, sandwich spread, cheeses, cookie or pie dough, cake frosting or similar products, a KP chub machine plan can improve product appearance and cut packaging costs. Let our representatives investigate this with you. Write today.

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THE NATIONAL PROVISIONER, OCTOBER 1, 1960

buyer shops around until he finds it. This kind of a beginning, on an individual basis, can lead to broader, industrywide cooperation between packers and retailers, which also seems desirable. Some of the biggest headaches, such as improved definitions and more stringent regulation of quality, which could be greatly assisted by the federal and state governments, can be tackled much more successfully by retailers and meat packers working together.

The two groups should start work at once on an industry code of ethics, a new recipe-research program, experimental variations in display techniques, floor plans, fixture design.

Of course group action and government assistance are very useful in certain circumstances, but we are certainly not suggesting these measures will ever replace private competition. Undoubtedly, individual packers will find ways to accomplish some of these objectives by themselves, or will begin taking individual steps when the group program has broken the ground. Certainly, the packers will be devising ways to put their own quality label on every cut of meat not long after the Institute has shown the way. But remember the consumer! Quality is more than a word to her, or a slogan or a trademark. If she gets a bum piece of steak with your name on it, look out!

CHECK-LIST: For the sake of discussion, I'd like to give very briefly a check-list of the recommendations we want to make to you:

- 1) A full-scale study of the industry's nomenclature to find better ways of classifying and describing kinds, cuts and grades of meat and poultry.
- 2) A broad research program in the improvement of packaging, labeling, layout and display techniques for the industry.
- 3) A development and design program for the new air-curtain fixture, to be followed by a test of these mixtures in cooperation with one or more supermarkets.
- 4) An industrywide study, by an AMI committee, of quality standards for fresh meats, processed meats and hams.
- 5) An industrywide study, with representation from the AMI and also from retailers, to develop a code of ethics for the industry.
- 6) A study of the relations between packers and retailers, especially supermarkets, to discover and isolate causes of friction and misunderstanding and to develop methods for eliminating them.
- 7) The establishment of an Institute committee to investigate ways and means of speeding up the existing programs for improving the breed of beef cattle, and of publicizing this to the consumer.

We have one final recommendation quite different



ALL the shiny displays are packed away for shipment home as AMI's 55th annual meeting becomes history.

from the others. You might call it a business type of recommendation. You are in a business, and we are in a business. Sometimes we ask ourselves what other or additional business we could be in. It's a good question for any business to ask, and so our final recommendation is that you sponsor an investigation and discussion of extending your function beyond packing—into producing on the one hand, or retailing on the other. That is, investigate the possibilities, for example, of developing new or broader channels of distribution. We think you will find this an interesting question to consider. It may be a wild-blue-yonder type of thought. Extending your function may not be feasible, but the investigation may have interesting offshoots.

(EDITOR'S NOTE: The following discussion, based on the Loewy report, took place at the sixth general session on Tuesday morning and was the concluding feature of the speakers' program. It is presented here in the interest of continuity.)

DR. J. DONALD PHILLIPS, president, Hillsdale College, Hillsdale, Mich., moderator: Yesterday afternoon, following the report from the Loewy representatives, 18 people met to discuss the recommendations and, in my opinion, they really dug in.

First, we discussed them as a mixed group and second, as packers, wholesalers and retailers. Then, each group elected a representative to give you some of their reactions to the recommendations. J. C. Mommsen, vice president in charge of sales, Armour and Company, Chicago, will represent the packers; N. L. Chaplicki, vice president of National Tea Co., Chicago, the retailers, and James D. Stimpson, meat specialist for the National-American Wholesale Grocers' Association, the wholesalers. Now, to go right into this, did you find your group concerned more about one recommendation than about another?

N. L. CHAPLICKI: Yes, we did. Our group of retailers was very much concerned with the first recommendation for "A full scale study of the industry's nomenclature to find better ways of classifying and describing kinds, cuts and grades of meat and poultry." We believe that a study should be made. I will forward this to the National Association of Food Chains and also to the Super Market Institute and the National Live Stock and Meat Board to see if we cannot get together and work on a program of nomenclature. I am sure you realize that it is going to be a very tough job because of the various names for a product in the various areas of the United States and Canada. However, during World War II price controls, we did get together as an overall country on names for products. Some of the new names and descriptions have remained with us.

We believe that certain packaging of meat at the packer level and, of course, in frozen state yet to make its debut, will correct a lot of the complaints that the Loewy report has aimed against both the packer and the retailer.

I think that the retailer, in 10 years, has done an excellent job in packaging, labeling, cutting and trimming meat throughout the American country. Nobody has done a better job. I believe that some of the criticisms are unwarranted. I think that all the retailers can leave this meeting with their heads high because we have done a good job, regardless. I do believe that criticism as contained in the Loewy report is just the thing that we probably need to perk us up to the next plateau.

MODERATOR PHILLIPS: Did anyone else happen to have that as a priority, also?

J. C. MOMMSEN: We, as a packer group, did not select that as number one priority. However, we do think the recommendation is important and we think

[Continued on page 166]

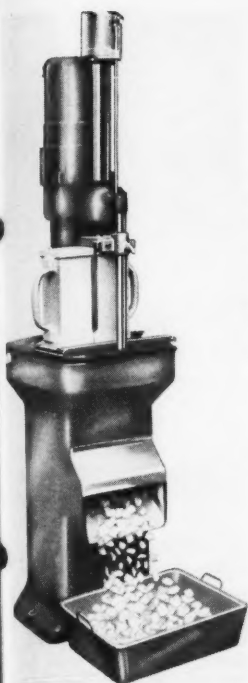
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- ✓ Two separate speeds on bowl and two speeds on cutter.
- ✓ At the end of chopping cycle, stainless steel propeller-type mixing blades take over, mixing ingredients thoroughly under push-button speed control, and at very low temperatures.
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- ✓ Mixer blades are at horizontal position, *away from the product* during chopping.

The Werner Cutter-Mixer is an entirely American made machine and uses standard, readily available components such as GE motors and Timken bearings. Cutting blades are of highest quality stainless steel. Designed for safe and lasting trouble-free service. Easily cleaned—every part accessible.

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Mounted on a floor stand (with or without rollers), wall or post and with knee or foot controls, this air-operated machine is another great time-saver, besides giving you absolutely uniform closing pressures. Equally useful for opening ham boiler presses after cooking is done. Pays for itself in short order, in time saved.



Shown above is open view of Werner Cutter-Mixer head. Black arrows point to mixer with independent drive, unique feature of this machine.

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THE NATIONAL PROVISIONER, OCTOBER 1, 1960

145

Achievement of Lower Distribution Costs is Challenge for 'Soaring '60s'

Don Grimes, president, Independent Grocers' Alliance, says packers should concentrate on fewer but bigger accounts.



A CHALLENGE which the food industry must face up to is the lowering of distribution costs. There are many industry segments involved in bringing the farmers' product to the consumer—farmers, breeders, feeders, processors, manufacturers and jobbers, distributors and retailers. During the past 30 years, certain segments have been able to reduce operating costs substantially faster than others, through changing methods, mechanization, automation and by introducing new ideas. I would like to dwell on these points because I believe we have reached a phase in distribution where all segments must coordinate their activities and assist each other in getting operating costs down and keeping them down.

In this process we will find, I am sure, that there is too much duplication of effort and that we must sensibly approach the problem with a review of some of the ways and means by which lower distribution costs may be achieved, for this is our challenge for the "Soaring Sixties," a decade in which we have been led to believe that both volume and profits are going to skyrocket.

Contrariwise, we find ourselves on a high economic plateau. In our optimism, we may have overlooked the fact that we must cut corners and keep operating costs down, too, for many of us through the years have learned that increasing volume with proportionate increases in expense rates, followed by higher prices to the consumer, will not for long solve the problem of making more money for stockholders. However, increased volume with lower operating costs can multiply dividends.

It is rather noticeable, as we study distribution methods, that each segment is doing its own job and paying little or no attention to the other segments. It reminds me of a group, maybe this group, whose picture has been taken and the photographer has sent a proof around for your order. What do you look at first? Your own picture, don't you? Why? Because you are primarily concerned with yourself; that is human, and that's exactly what the different segments of distribution are doing. We are looking at our own picture and not recognizing that it is the group as a whole that made the picture possible.

All segments of distribution are related to each other; what one does, the other should know about, for if one section has found out how to change methods and get operating costs down, another section that is informed may be inspired to do likewise.

CHANGING PICTURE: It is apparent through the years that our group picture has changed. Some are not represented, particularly the smaller segments of distribution which have not been able to compete. Some are older and I daresay wiser, although not anxious to

change. And, some are older but not much wiser, for in the meat distribution field alone you have allowed a change to creep up on you from the outside. I believe that in the not-too-distant future the meat packer will be out of the business of actually distributing his product to retailers if the present trend keeps up. One of your own members told me not too long ago that he feels your industry is 15 years behind in recognizing the changes that have been taking place in food distribution and in doing something about them. He said he doubts that packers will survive as distributors but feels they will concentrate their efforts more toward research, processing, manufacturing and increasing their efforts on by-products—an activity which helps keep stockholders happy.

The fact that today there are 100 meat distribution warehouses operated by the chains—we in IGA have just opened our fifth and other voluntary and cooperative organizations are doing the same—bears out the statement made by your member. The trend definitely is in this direction.

May I be so bold and frank as to state that we in retailing have taken the bull by the horns without much help from the packer and with considerable resistance initially, and we are forcing the packer's operating costs downward as far as his relationship to our stores is concerned. We have taken the packinghouse salesman out of our retail stores. We have eliminated credit risks for the packer from individual stores through central billing. Larger orders per store are decreasing packers' delivery costs too. Now, we're taking the next step and developing our own meat distribution systems.

In the case of meat warehousing, we have accepted the burden of warehousing and delivery. In one territory alone the delivery costs of one packer approximated \$9,000 per year. We are saving him 100 per cent of this cost. One of our territories covers as many as four and five packer delivery territories.

PACKER SUPPORT WARRANTED: If the packer would consider that we have organized some 4,000 stores under this system, and realize that we have saved him over \$750,000 a year by the elimination of salesman, their car expenses and credit risk, he should support this effort to the fullest possible extent. We have surveyed and established that it costs the average packer, on the average territory, \$5.50 to \$6 to take orders for each independent store in that territory. Most retailers, who continue to have packinghouse salesmen call on them, use from five to seven salesmen. Their aggregate order taking cost amounts to \$35 to \$40 a week. These costs are reflected in the price we pay for our meat. Yet we have not been paid for the efficiency we have created.

If you are disturbed by what I have just said, I refer



Hobart 10 h.p. grinder beats other 25 h.p. units on all counts...

says **Walter O. Decker**
President
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"With a 3/16" plate, our sausage flows through the Model 4056 at the rate of 9000 pounds per hour. Beef can be ground at the rate of 7500 pounds per hour on first grind with a 1/8" plate.

"Meat cells are clean-cut, giving us maximum maintenance of bloom in the finished product. There's no mashing or rolling of meat through the cylinder. Instead... a flow that has no parallel.

"...cleanup is simple and fast with the completely enclosed housing features... cylinder can remain in place during cleanup. The sanitation features of this unit are exceptional."

SAFETY is a prime feature of the Hobart Model 4056. Large, high-clearance cast aluminum guard and special bowl design guard against accidental contact with the worm. Simple, dependable interlocks shut off motor current if pan with guard is raised or the bowl is not in position.

High-back stainless steel pan permits dumping full tubs of meat without spillage. Unit is available in stainless steel or baked enamel housing. For information on this or other Hobart meat grinders, write: The Hobart Manufacturing Co., Dept. 213, Troy, Ohio. In Canada: 175 George St., Toronto 2.

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THE NATIONAL PROVISIONER, OCTOBER 1, 1960

you to our own activities which have lowered wholesale operating costs by concentrating purchases from fewer accounts. Our organization, which is only 34 years old, has a dues-paying membership of over 5,000 retail owner-operated stores throughout the United States and Canada. Of this total, about 4,000 stores are operating under the IGA TableRite meat program. In order to get operating costs down, we recognized that we had to change methods, so we started in the grocery end of the business and eliminated salesmen. Instead, the retailer was given an order form which listed all items at wholesaler's costs with a suggested retail selling price, meeting competition.

The retailer filled in this order merely by indicating the number of cases he wanted and sent it to the wholesale house with a check made out to the wholesaler—the amount to be filled in by the wholesaler. Retailers agreed to send their orders in at specified times during the week, and every week. They also agreed to assist in unloading trucks when they arrived so that the same trucks could haul two loads instead of one, where conditions made this possible, or where one truck could go out without overtime payments resulting.

The fee schedules encouraged the retailer to concentrate his purchases, and as a result, the size of the orders increased. The larger retailers were encouraged to join forces, and this increased volume still further lowered the overall operating costs. Large single orders brought about reductions in costs all the way along the line: at the sales level, where one-third of the operating costs were eliminated; at the warehouse level; at the delivery level, and at the administrative level.

OBVIOUS ADVANTAGES: It can be reasoned quickly that wholesalers with trucks going out and making 40 stops are going to operate at higher costs than a wholesaler whose system makes it possible to have two or three stops, or even one stop per truck load. It doesn't take much figuring to romance the advantages of such a system. That is why the voluntary organizations have been growing steadily, and unaffiliated wholesalers and retailers are fast going out of business.

After the wholesaler streamlined his operations, he went to the retailer and asked him to do the same. The retailer adopted a self-service system with a cash-and-carry policy. The retailer remodeled his store. He arranged it according to the best system of the day. He displayed his merchandise scientifically. His departments were put in at strategic points about the store. He employed better personnel and trained them. He adopted accounting procedures that would guide him along the way. He accepted supervision to correct faults. He advertised with a group under a common banner and, as a result, his sales increased and his purchases from the wholesale house increased likewise. As the years rolled by, he kept upgrading his store.

We suddenly realized that we had solved the problem of distributing groceries, for we were able to sell on the most competitive basis and make a profit. More than 23 years ago, the application of this new method reduced wholesale grocery operating costs from 8½ to 10½ per cent down to less than 3 per cent. At the same time, retail operating costs were reduced from 20 per cent down to 10 or 12 per cent. These drastic reductions in operating costs were achieved by changing methods. However, today costs are creeping back up. You cannot continue doing the same old thing in the same old way and expect to get distribution costs down and keep them down.

We began to realize that the same principles involved in the changing of methods in the grocery field applied also to all other departments in the store. Take, for in-



ANIMAL AGRICULTURE award of the American Meat Institute is given to Under Secretary of Agriculture True D. Morse (left) by U. S. Senator Everett Dirksen of Illinois at the annual dinner on September 19. In making the presentation, which was a feature of the banquet, Dirksen said: "The name True D. Morse is a name which is synonymous with fine husbandry. All his life, he has advocated and fought for the betterment of agriculture. I can truly testify that in these last 7½ years he has stood as granite in his official capacity as Under Secretary of Agriculture for more freedom and more opportunity for American farmers. His voice has been heard in committee rooms of Congress, in the executive offices in Washington and on the hustings across the country. He is truly the workhorse of the Department of Agriculture and is most deserving of this award."

stance, the bread industry. Bread is delivered to independent stores at terrifically high sales and distribution costs, which made it impossible to compete with the chain stores. By changing methods, however, by arranging for concentration of orders, elimination of guaranteed sales and larger deliveries per stop, we have overcome this disadvantage and are now competitive. We are doing the same thing in the dairy field and in frozen foods, as well as in our meat operations.

MEAT FEAT: In the last 10 years, our meat organization has developed and has given us an opportunity to know you better, to take advantage of your cooperation and assistance and to weather also your resistance to some of these changes. In these short years, we have developed a meat operation with a supervisory and buying staff consisting of more than 400 men devoting their entire time to producing more meat sales at the retail level. This year we will move through our IGA TableRite meat program in excess of 400,000,000 lbs. of meat. While this is not a considerable figure to this audience, when you consider that it has been accomplished in a short space of time and that in almost every instance an upgrading of quality was necessary in practically every IGA retail outlet to bring the stores up to the standards we have set—and which we hope are equal or better than any competition we face—we feel this is a real successful feat.

Because IGA is an organization of individual owners, our particular system is necessarily different from that of the corporate chains. While our system may seem to be unorthodox, it seems to have worked, for our sales increase each year has been higher than the national average. Last year our sales increase was 34 per cent

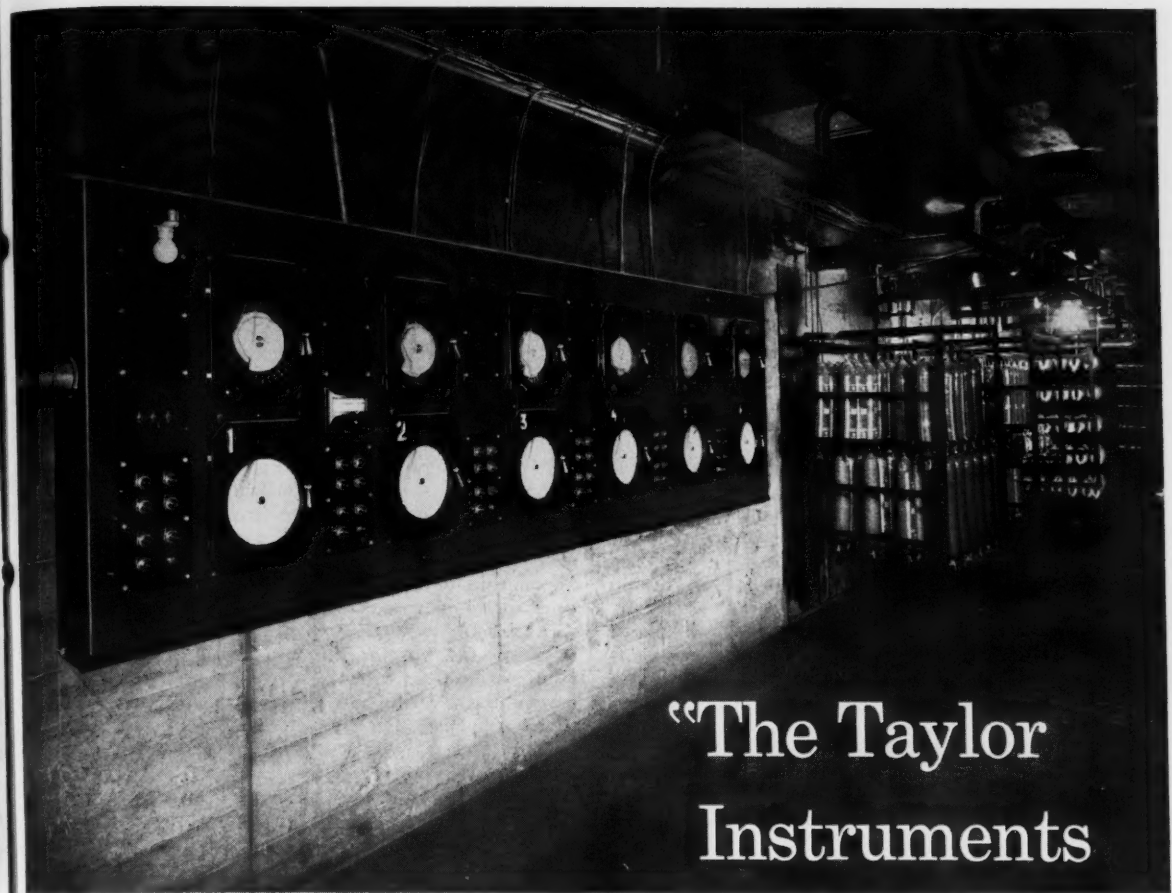
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ER 1, 1960



"The Taylor Instruments

are doing a fine job"

Taylor "push-button" Time-Schedule control systems for Atmos smokehouses at the Los Angeles Meat Company.

... reports Mr. Ben Lilien, Los Angeles Meat Company

A reputation for top quality meats has been responsible for the success of the 'Lilien' brand in the Los Angeles area. Products include Wieners, Salami, Hams, Bacon, Sausage and other smoked meats. Each of their Atmos smokehouses is under fully automatic Taylor control. All the operator has to do is push a start button . . . the instruments do the rest. Here's why: once the ideal time-temperature schedule is determined, cams for the upper

half of the instrument are cut for both wet and dry bulb temperature. The cam follower mechanism adjusts control points of FULSCOPE* controls (in lower case) so that all succeeding schedules are identical. When different schedules are required, simply substitute appropriate cams.

The installation includes an afterburner which provides a primary source of heat and renders smokehouse discharge acceptable to Los

*Reg. U.S. Pat. Off.

Angeles smog control authorities. From such a control system Los Angeles Meat Co. derives four major benefits:

- Minimum smoking time**
- Low operating costs**
- Minimum shrinkage**
- Consistently high quality**

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Taylor Instruments MEAN ACCURACY FIRST



FOUR LEADERS of the meat packing industry were honored by the American Meat Institute at the annual banquet for outstanding achievements in community relations. Awards were presented to H. H. Corey, chairman of the board and chief executive officer of Geo. A. Hormel & Co., Austin, Minn.; John F. Krey, II, president of Krey Packing Co., St. Louis; Oscar G. Mayer, chairman of the board of Oscar Mayer & Co., Chicago, and H. Harold Meyer, president of The H. H. Meyer Packing Company, Cincinnati.

COREY (shown receiving his award from AML board chairman George W. Stark) a former All-American football player at the University of Nebraska, is a member of the board of directors of the Chamber of Commerce of the United States and a trustee of the Committee for Economic Development. He also is a member of the boards of directors of AML, the American Meat Institute Foundation, and the National Live Stock and Meat Board. He is chairman of the Hormel Foundation and former board chairman of AML.

H. H. MEYER has served for 19 years on the board of managers and has headed important committees for the Bethesda Hospital and Deaconess Association, which comprises a hospital, home for the aged and nurses' training school in Cincinnati. He also is a member of the lay board of St. Mary's Hospital in the same city, and in 1941 and 1942 he helped establish a 40-bed hospital in his boyhood home town, Westfield, N.Y. He

has served as AML treasurer and a member of the Institute board for 29 years and was a member of the group that created the American Meat Institute Foundation. He has served as secretary, treasurer, vice chairman and chairman of the AMIF board. He served on the War Meat Board during World War II.

KREY has held directorships and headed important committees of the Metropolitan St. Louis Chamber of Commerce and the St. Louis county Chamber of Commerce. He is a member of the president's council of St. Louis University and is on the advisory board council of St. John's Hospital. He also is a director of the Automobile Club of Missouri. A few years ago, he represented the U. S. as chairman of the Foreign Operations Administration civilian orientation conferences in Lisbon, Portugal. He is a past board chairman of the National Live Stock and Meat Board and AML.

MAYER (whose award was accepted by his son, Oscar Mayer, jr.), a Phi Beta Kappa graduate of Harvard University, is a former president of the board of trustees of the University of Illinois and a life trustee of Beloit College. He has been awarded honorary Doctor of Law degrees from the University of Wisconsin and St. Ambrose College and he received Northwestern University's Centennial Award in 1951. He is a past president of the Chicago Association of Commerce and a former AML board chairman. He served for three years as a member of the board of the Chicago Public Library.

in our TableRite beef program. We are quite sure that we are not increasing the consumption of meat to that extent and, thus, must assume that we are doing the kind of a job that meets with the consumers' approval, for more and more consumers are giving us their patronage.

Proof of this is that consumer preference surveys show IGA stores in Dayton doing 27 per cent of the business, with a national chain in second place doing about 17 per cent. In Wichita, IGA stores now do 35 per cent, and a national chain is second. In Topeka, the figure is over 32 per cent; in Ottawa, Canada, 51 per cent; LaCrosse, Wis., 30 per cent; Champaign-Urbana, Ill., 31 per cent, and credible showings are being made in many more areas where the wholesaler-retailer team with strong national headquarters support is clicking. These accomplishments could not have been possible without the cooperation of many individuals of your great industry, and for this we are truly thankful.

Since the meat packing industry grew up with the railroads, the branch house system was organized to serve the relatively small retail establishments of those days. The advent of the modern highway, modern trucks, better merchandising and new retail concepts developed a trend in the industry toward decentraliza-

tion. We believe this is good, and we expect to see this pattern toward decentralization become more and more aggressively apparent.

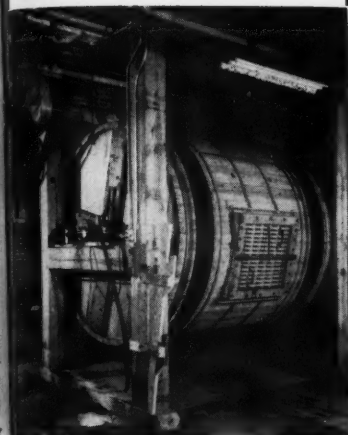
Our crystal ball does not disclose all the improvements that must be made in bringing operating costs down. However, the meat warehouses operated by the chains and by our organization are definitely a step in this direction.

We feel, however, that we would rather have our capital invested in retail stores than in meat warehouses, although to be perfectly frank with you, we just cannot wait for you to find the answer to these ever-mounting costs of distribution. Even if the warehouse method that we are developing proves to be wrong, if it spurs you on to greater efforts toward helping us get these distribution costs down, we think it will have been well worthwhile.

PROFIT VIA LOWER COST: We at the retail level would like to see your industry's earning capacity improved; we believe it would be good for the whole economy. However, we do not want to see it improved if the result is an ever-mounting cost to the consumer. We believe your improvement must come from eliminating obsolescence, greater automation, improved methods of selling and a great improvement in distribution

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PACKERS EVERYWHERE PROVE:

Tying meat by hand is old-fashioned and costly

In packing and processing plants across the country, where Bunn Machines have modernized meat and poultry tying, managers report: "Wrapping time cut 60%" . . . "Frees two men for more important work" . . . "Saves hundreds of dollars a week" . . . "Tying time for 10-tie rolled roast cut from 4½ minutes to less than 30 seconds" . . . "We get a neater, tighter, more uniform tie than ever before—better appearance and customer appeal."*

Anything you now tie by hand—hams, slabs, poultry, rolled or boxed meats of any kind—can be tied

better, cheaper and up to 10 times faster on the Bunn machine especially designed for this job. Size or shape makes no difference. The machine adjusts automatically and ties a slip-proof knot that stays put. Easily operated by anyone and virtually maintenance free.

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*Identifications on request



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costs. We further believe that we can sell more meat if the entire industry—both at the packer and the retail level—would concentrate more on selling meat and less on selling brand.

I certainly do not want to start any verbal battle over the value of your individual brands, because we have brands, too, and we recognize the fact that the packing industry very frequently questions the need for a retail private brand when the advantages of a nationally advertised brand seem so obvious. What you may not realize is that with every packer fighting desperately to get his brand into the retail store, and frequently by making good price concessions, the retailer by buying one packer's deal this week and another's the next was continually giving a different-flavored product to his customer. Our policy on this is that we ought to have a well-established and nationally-advertised brand in our stores; we should have a local brand, if necessary, and our own brand.

For instance, by developing our own brand of bacon and merchandising it along with one or two other well-known brands, we acquire some fringe benefits that you may not have thought of. Just as you like to sell your own brand best, so does an IGA meat cutter like to sell his brand best. He is not so susceptible as he used to be with so many packer brands. Therefore, inasmuch as we are selling fresher bacon of the same brand each week, our sales continue to mount and our retailers are no longer influenced by pressure from the sales personnel of the packing industry. And, as our sales increase, we have another benefit that crept in through the back door—we are able to ship in larger quantities, and this again has a tendency to cut the costs of distribution.

It would seem that the packing industry's concept of brand distribution differs from ours. We believe that brand distribution should be judged by how much more product is in how many more kitchens, not necessarily in retail outlets. For example, one wholesaler in 1930 had about 3,000 customers doing about \$5,000,000 annual business. Today that same wholesaler has 150 stores doing about \$50,000,000 worth of business annually. Thus, you can readily see that there are more IGA peaches, corn, peas and tomatoes in more homes, with fewer outlets. This is true brand distribution, and this activity lowers costs. Just as we in IGA have organized and promoted better merchants, so have we been able to show the substantial gains that we have enjoyed during the past few years.

PACKERS' WAY, TOO: We believe that you will have to go through the same process, and if you can't think your way into making the decisions that will bring this to pass, we believe you will go through it by the process of attrition. For example, Glenn Curtis, who is now in charge of our perishables operations—the man who developed our meat department eight years ago—reported to me that he visited an independent store in Alabama that had 27 brands of bacon. He estimated that the store was doing \$1,800 meat business a week. Glenn said that if he were sales manager for any packer, he would dismiss the salesman who introduced another brand into that store, because 27 brands of stale bacon were getting into people's homes. It is interesting to note that a year-and-a-half later this store went bankrupt.

The meat packing industry is going to have to take a long, hard, cold look at the terrific cost of distribution to many small outlets. I am glad to say that there are already signs of improved methods of distribution. Several plants are now serving to store door—from as far away as Omaha into retail outlets in Florida. We feel



SENATOR Everett Dirksen of Illinois seems to be telling the NP cameraman, "It's a long time between shots."

this is one step in the right direction that is being taken by meat packers.

Other methods will undoubtedly be tried in order to cut every ounce of fat that there is in the cost of distribution, including the cost of receiving at the retail level. Just as the grocery and produce industries are palletizing perishables and reducing warehousing costs, we believe the same possibility can extend to the meat

FIRST retailer recognition made by AMI was presented to Walter E. Fitzgibbon, retired senior meat consultant for the Kroger Co., by George W. Stark (left), Institute board chairman. The award was established to emphasize packer-retailer relations.



industry—packaging meats and palletizing them so they can be shipped easier and received easier. Bananas, for instance, are being palletized. Potatoes, sugar and hundreds of items which yesterday could never have been palletized are now finding palletization a routine practice, resulting in lower costs.

UNIFORMITY NEEDED: We have researched and proved that trimmed cattle produced at the packing-house for use at the retail level are very desirable; yet, uniform standards by all packers have not been established. As a result, we have suffered from lack of uniformity. It was necessary for us to establish our own standards in order to have a brand on which we could merchandise and develop greater sales. All packers, generally speaking, are using a different coding for bacon, sausage and sliced luncheon meats. It is very difficult, and I would say impossible, to decipher such coding or even understand why there should be so many differences.

The packaging industry has sold the packer new types of machinery and package materials which are not necessarily advantageous to food distribution nor to the consumer. It is apparent that not enough research has been done by the packaging people or the packer. The flip-top bacon box or tuck-back box are good examples.

Looking further into the crystal ball, you, too, may have to adjust some of your thinking and recognize the

fact that just cold economics tells you that each of five to 10 packers can't continue to call on every little market in your efforts to get brand distribution. There is nothing wrong with a small store, but there is if one stays small. Nor is there anything wrong with small stores with big-thinking men running them who will concentrate their purchases with one or two meat packing companies.

A need for cash-and-carry supply houses appears to be developing. They will be the market place for the small stores in acquiring groceries, meats, dairy products, fresh fruits and vegetables, frozen foods, baked goods, etc.

Getting back again to servicing every little store, the Kraft organization, Heinz and many others have changed their philosophy, and now they distribute their brands through reputable warehouses throughout the country. It is gratifying to us that most of the major packers have discontinued, or are in the process of discontinuing, distribution of their grocery line through branch houses and are now shipping to our warehouses straight truckloads of grocery products.

BETTER STORES AHEAD: We are going to have to design better stores in the future than we have in the past, and I don't necessarily mean bigger stores. I mean stores with a better functional design to serve more people in fewer retail outlets. We will have to consider more automation in our meat cutting rooms. We believe that most of the meat cutting operation in the retail store will be obsolete in just a few years. Just as you people are processors, we at the retail level are processors as we break down the carcasses or primal cuts into retail cuts, and we are going to have to find a better way to do it than we are doing it today. The so-called bantam stores, we believe, will not be much of a factor in the movement of fresh meats, for our studies indicate a retail store will have to do a minimum of \$9,000 a week in order to sustain well-organized perishable departments, particularly the meat department.

We believe also that there are going to be fewer small markets and that the larger ones will take over the job of satisfying the wants of our exploding population. There is going to develop a greater and closer cooperative effort between IGA suppliers and retailers and the packers. This, we believe, will be particularly true in the merchandising field.

We embarked upon a promotion with one major packer to sell the greatest variety of hams in the world. We were familiar with the standard sizes and kinds of ham being sold at the retail level, but we found as we developed this promotion that there were a great many varieties of hams which we had never offered to the consuming public. Some of these varieties did not result in large sales as far as tonnage is concerned, but the promotion did give the consumer a new menu plan or idea and it sparked the merchant into trying a new merchandising approach on ham. We worked closely with this packer to complete an advertising format, with a complete sales promotion effort through bulletins and cutting demonstrations, plus displays of entire varieties of hams at our regional meetings around the country and a great many special retailer meetings. The end result in one week's sale was that over 70 carloads of various varieties of packer brands of hams were moved out of our stores. This, of course, resulted in nice sales increases for our retailers. Probably the most important result was the improvement of distribution of that particular packer's hams in most of our territories, plus the continued increase in the sales of hams in IGA-affiliated stores.

We have developed a promotion somewhat similar to

this with another packer on another item, bologna. We also will promote his smoked meats and bacon on a national basis.

IMAGINATION PAYS: It is well to remember that when a merchandising organization such as ours has been developed and employs men who are outstanding in their field and who are young, we sometimes may come up with ideas which sound impossible. Here again, however, since these men haven't been told it couldn't be done, they go ahead, and the result is success. For example, in June, 1958, IGA planned a two-week pork promotion. We did not know what the price of pork would be in October, 1958, but we did know that it would be plentiful, and we had very successful results. One of our wholesalers in a remote area, with 25 stores, decided that the stores would sell whole hogs and promote them with the idea that they would be processed eventually for home freezers. In two weeks, these 25 stores sold 100,000 lbs. of pork—or 646 whole hogs. This was in addition to approximately 50,000 lbs. of regular packer pork cuts. The point here is that the imagination and the willingness to create sales, plus the initiative to take on something of this nature, resulted in success not only for IGA stores participating in the pork promotion but also for the packer.

We believe also that your wonderful nutrition advertising program is beginning to get through and that with greater mutual effort we can convince more and more consumers that the meat products we sell are full of proteins, vitamins and minerals, very nutritious and health giving.

COMMUNICATIONS PROBLEM: I am aware that there is no magic formula to solve our many mutual problems, but I am of the opinion that you will make a greater return profit-wise when you recognize more of our problems at the retail level and then together we learn how to solve them realistically. I believe that you, as packers, and we, as retailers, can produce a greater return on dollars invested and we would like the opportunity to work closer with you but, quite frankly, we in the retail field are just not quite sure how to go about it.

Communication between the packers and the retailers, through the wholesaler, should be improved. While I hate to be the instigator of another committee, it is possible that in this case it might be our best solution, provided that this is a working committee and meets with a carefully prepared agenda. We, as retailers, have numerous problems as a result of some of your actions. We believe that you could help us and, in turn, we most sincerely would like to come to you and render any assistance that we can for problems you are having at your level as a result of some of our actions.

We recognize that there should be a closer liaison between your industry and ours. When we are able to understand each other's problems more clearly, we will solve them. Mechanical difficulties of any industry are usually easily solved, but lack of understanding between human beings is our greatest problem in industry or for that matter in the world. As we work closer together, new ideas never dreamed of before will come to light. Ideas really are infinite; the only place where they appear to be limited is within ourselves. When we accept such limitations, our progress wanes, and we do business in the same old way. But thinking is stimulated when two or more persons exchange ideas, with a common purpose in mind. Let's all of us do more of it, for we in IGA firmly believe that the responsible retail outlet and the packer, through our wholesalers, can make substantial improvement in the cost of distribution from the live animal to the consumer's table.



It's Good Business to Glorify Meats by Advertising Their Nutritional Values

AMI advertising consultant Vernon D. Beatty urges retailers to get away from mere price listing and promote meat to hilt.

I SUBMIT to you, for your approval, another plank in the meat platform. This plank calls for making the most of our common opportunity to improve results by putting meat's best foot forward.

First, let me read what it says on this package: "... the greatest concentration of vitamins, protein and minerals ever offered ... a man could live for days on Kellogg's Concentrate and water ... one ounce has: More protein than an egg and two strips of bacon. More Niacin than three ounces of beefsteak. As much iron as two ounces of beef liver. As much thiamin (Vitamin B1) as three ounces of pork."

These statements appear not only on the package but are also the major theme of widespread advertising. Observe that for these nutritional comparisons, meat is the yardstick.

Many foods, in their advertising and on their packages, lay claim to proteins, vitamins and minerals. Here's one for the book. On the can it says Metrecal is a complete, nutritious, scientifically balanced meal. You mix it with water. It's got protein, carbohydrates, fat, vitamins and minerals. When you're living on this to take off weight, you're not a customer for meat or for anything else in the food store.

Here's one more: "If you seek good nutrition at low cost," it says in an ad of General Mills, "just two ounces" of MPF all vegetable food concentrate supplies "one-third of an adult's recommended daily allowance of protein ... iron ... thiamine ... riboflavin and niacin." You can get all this, it says, for "about 3¢."

These are merely interesting examples. Walk the length of any food store. Meat's competitors, nutritionally, are found on the shelves in just about every aisle. The nutrition appeal is successful because shoppers have become aware of the need for good and proper eating. Don't be deluded for a moment into believing that wives and mothers are not genuinely interested in feeding their families for their health as well as their eating pleasure.

MEAT'S MANY VIRTUES: Now, let me read the text of a meat advertisement, to illustrate a point: "Meat is a rich and dependable source of complete proteins. Proteins build and repair muscles, cells and tissues, and help keep good firm flesh on the bones. Meat is a dependable source of many essential minerals. Meat is high in readily available copper and iron—the red-blood builders. Meat is rich in phosphorus which works with calcium for sound teeth and bones. Meat is an important source of vitamins, especially the Vitamin B group which includes Vitamin B1 (thiamine), necessary for growth, appetite and protection against certain diseases. Meat is prescribed by physicians, nutritionists and dietitians for both the overweight and underweight; for young and for old. Meat is fun to eat. Meat is good for you."

There you have it in a nutshell—the goodness of meat. Any piece of meat is in reality a serving of protein endowed with essential minerals and important vitamins, and wrapped up in all the good eating satisfaction that is meat's and meat's alone. A year and a half ago, scarcely a single meat packer or processor so much as mentioned the nutritional advantages of his meats. Why this was true, no one will ever know. Today, over half of all meat advertising by packers and processors includes the nutrition theme; in some cases, they proudly elaborate upon it in TV, radio, the printed page and billboards.

THE "COMPLETE" PROTEIN: We wish to advance the proposition here that it will be to the tangible advantage of the retailer to do as so many of his meat suppliers are doing, in fact to take the leadership in his meat advertising in promoting further the widespread recognition of meat's nutritional superiorities. For the meat counter is the last and, some say, the most important link in the chain of movement which brings body-building, strength-giving protein into the lives of 180 million Americans—not just protein either, but the complete protein our nation and our people must have to live and thrive. By "complete" I mean just that. Not all protein is complete; meat protein is.

Everyone in the industry would like to have a hand in selling more meat, at more attractive prices, to more people, more of the time. Price and price alone, however, is only half the inducement a shopper needs to buy meat with assurance and to buy more of it. Yesterday you heard re-emphasized a statement of fact already familiar to you. You were reminded that meat



GUESTS halt by "little grass shack" on way to dinner.

THE NATIONAL PROVISIONER, OCTOBER 1, 1960

is not only the store's most productive department but is also, and most important, the store's best box-office attraction. Meat is number one when it comes to attracting customers.

Our proposal is that something more can be done by the retailer at no cost or expense, just as it is being done by many meat packers and processors at no cost or expense to them, to make meats and the meat department even more important and more productive.

It is good business (that means, it pays off) to tell and remind your customers that the pork you are offering today is an excellent source of the B-vitamins, especially B1 (which is good for the nerves and aids digestion)—that your bacon is tops as an energy food (what better way to start a strenuous day or to stoke the furnace at noon-time?)—that your beef roast is bursting with proteins and is a source of food iron that makes for good red blood—that the old folks need lots of your ground beef because it repairs and rebuilds body tissues—that adolescents need more of the proteins and vitamins and minerals found in your wieners, for example, because they're growing and meat helps kids grow like nothing else. This kind of selling goes far to remove the hesitant uncertainty that assails so many shoppers when they confront that wonderful (and wonderfully confusing) meat counter of yours.

You heard yesterday that "the purchase of meat is for the shopper an important but anxiety-producing task and that she requires a special kind of reassurance." Nutrition information will do much to reduce that anxiety and to provide assurance, to raise the stature of meat, to increase its movement, to attract new trade and to improve meat department results.

What if everybody else's meats do have the same healthful ingredients? All compact cars are compact and have other common advantages, but Corvair doesn't pass up stressing its virtues just because the Valiant can say the same thing. Nor do the competing cereals. Neither loses its individuality by competitively stressing many of the same attributes. Meat's competitors know what they're doing. They're doing all right for themselves, too, at the expense of meat.

PROMOTION IS NEEDED: Let's look at reality for a moment. Can we rest on our laurels? Can we go on assuming that everyone knows there's nothing like meat and folks will eat more of it just because they like it? Can we go on assuming that just because we're doing all right, nothing more needs to be done? What needs doing for the good of meat needs doing for the good of the brand and for the good of the store. Do we forget that meat accounts for 25 per cent of the food budget, that this percentage figure should grow, not diminish, that profit can grow with volume and that price is not the only inducement to more sales? Do we fully realize that the other way to get volume is to upgrade the image of the product and what it will do for you?

What meat promotion calls for at all levels is advanced thinking to advance meat's possibilities. "Getting by" is not enough. A supplier's brand image borrows much from the image of meat itself. A store image is importantly the image of the meat department. Do we shrink from "cluttering up" a brand ad, as an advertising agency man said the other day, with a few more words in order that we may say all the good things that can be said about our meat item?

I do not agree with the advertiser who regards the healthful goodness of meat as "not worth mentioning." I say it adds to the warmth, the appeal, the box-office interest, the sincerity and believability of any ad to give all the constructive reasons for buying any product. More and more meat suppliers are coming around to



TABLE traveling is a friendly feature of the AMI dinner.

this belief, but for the good of the industry and its members, not enough Institute members have come around to this way of thinking. I wonder why.

When it comes to price listing meats in the store ad, let's not forget that it's the retailer who has the last word, in the ad and at the meat case. He puts the price tag on the meat and he decides what the housewife will get for her money. Other departments in the store can't always do that. If that selling price includes more than just a piece of meat—if it includes unseen vital and essential nutritional ingredients that the shopper must have and actually seeks—then, in the name of all that's good, why not say so?

Is it customers we want? How many items bring customers into the store? Meat brings them in like nothing else. Then why not promote meat to the hilt, nutrition and all? I ask you retailers to examine your product display footage. Compare department profits on a frontage basis. Consider that in the meat department you are free to allocate that space to your own best advantage. I ask you to take a deep, long look at what it would mean to the store's results if meat purchases increased in size and frequency by any reasonably good percentage figure you choose to pick. And last, I ask you to examine the advantages in making the meat image and the store image something shoppers reach for even more than now.

"Is this of practical value?" as Homer Davison asks. We believe it is. In short, it is good business to glorify your meats with the nutritional virtues they possess. It is not putting your best foot forward to rely, as most retailers do, on price alone to move the most meat and attract the most customers. This is an urgent matter and I would fall short of my responsibility and my duty if I did not urge discussion and decision on this subject.



PART of front speaker's table at the annual banquet.

Time Is Ripe in Meat Industry for More Effective Understanding and Cooperation

F. J. Townley, vice president, Swift & Company, points out that producer, packer and retailer all work for same boss.



ONE of industry's chronic ills is the serious lack of a suitable system of communications within individual companies and with the trade they serve. This has been pointed out in many trade publications. The food industry, due to perishability, perhaps leads the parade.

We all know that people, industries and countries are separated by barriers that are developed through poor attitudes as a result of poor communications. When Gerry Achenbach, president of the National Association of Food Chains, talked to us at our convention last year, he made quite a point of the fact that one of the magazines representing our industry had likened his

we can improve the lines of communications, we must first develop a positive attitude of cooperation with one another. We must desire to improve our relations.

NEED NEVER GREATER: The need for communications in modern living is far more important than it has ever been in the past, as a result of the technical and scientific advances that are rapidly taking place. Society must learn to keep pace or, certainly, we will suffer the consequences. It took us 100 years fully to appreciate the principles of the steam engine. It took 65 years to apply fully the principle of electricity. It has taken 15 years to begin to apply atomic energy. Your guess is as good as mine as to the length of time required to apply the principle of solar energy. The \$64 question is, how long will it take us to apply the principle of cooperation, experimentation and communications within the food industry? We feel very strongly today that we have come to a point in the history of the meat industry where the time is ripe for more effective understanding and cooperation.

The food business is a most competitive one. The profit picture must improve so that there will be more money for pure and applied research. Businesses must take a serious look at themselves to determine if their actions and activities are adding real value to their products. They must see that their operations are planned and calculated to be sure that all waste is eliminated and that expenses are controlled in order to render the maximum required service at a minimum cost. It is important that the consumer's food budget is kept at a minimum through controlled expenses and at a price that will leave all the business a living profit.

What is the best way that we can improve the lines of communications? The American Meat Institute and



50-YEAR veteran William J. Bednar (left) of Geo. A. Hormel & Co., Austin, Minn., receives congratulatory handshake from Hormel president Robert F. Gray (right), as M. B. Thompson, Hormel executive vice president, looks on at Monday morning AMI breakfast honoring industry members of 75 and 50 years' service.

visit to Chicago to a visit by Khrushchev. Achenbach pleaded for a better understanding through a closer working knowledge of all facets of the packing industry—the producer, the packer and the retailer. He suggested that we form committees to study the many problems. This we have done.

Yesterday we heard the Loewy report regarding attitudes within and about our industry. For the record, I am not angry with anyone, especially not with customers. Some of the thinking was rather shocking but not entirely new. Many of us in the industry have been aware for some time of the attitudes of the consumer about the retailer, the retailer about the packer, the packer about the producer, and in reverse. There definitely is a criss-cross of attitudes throughout the industry that is not good, which in my opinion could largely be eliminated by better knowledge of the overall problem through improved communications. Before



AMI secretary and assistant treasurer Roy Stone (at rostrum) reports on activities of accounting committee at the accounting session held on Saturday morning.

its board of directors felt that one technique would be to assemble sales managers from the packing industry in a group so that they might learn more about their customers and their problems. The sales and merchandising committee of the Institute was reactivated just a little less than a year ago. Within the last year, this committee has had five two-day meetings. At each of these meetings, a retailer representative has been a guest as the speaker for the evening session. The purpose behind this was, and is, to learn more about the retailer and his problems of operation at the retail level—how to sell more meat at a profit.

Another of the activities of this committee has been to hold joint sessions with retailer representatives of trade associations. Last December such a meeting was held with the merchandising committee of the National Association of Retail Grocers. A meeting was held this June with representatives of the National Association of Food Chains, and on September 21 another session is scheduled with that same group. The primary purpose of these meetings has been to work with retailers to select areas where improvements might be made.

EARLY RESULTS: The day after our first meeting with NAFC representatives, the industry had a serious problem on the sale of lamb. We telephoned the representatives of the various companies represented at the meeting and asked if they would give some help in running a feature on lamb. I am very happy to report that, as I recall it, every company willingly agreed to go along. I personally received several beautiful ads where the retailers had promoted lamb. Naturally, our communications were poor or we would have known

about this several days or weeks before the problem became acute, but it does show that retailers can be counted on to do a good marketing job at any time if they are given sufficient notice of the problem.

The producer, the packer and the retailer are all working for the same boss—Mrs. Consumer. Let's never forget this, even though we must occasionally take time out to fight each other. She has just so many dollars to spend for food and recognizes a bargain when she sees one. There are many choices available to her when she goes shopping for food to feed her family, so we compete not only with each other but with every other food in the modern store of today. This makes it imperative that our product be fresh, palatable, nutritious, attractively packaged and properly priced if we are to expect her to pick up our meat when she goes shopping.

Vern Beatty painted a forceful picture of what we in the industry can do to popularize the tastiness, as well as the healthful qualities, of meat. We can all do it without additional cost, simply by improving our advertising technique. I am sure that our retailer friends will find it to their advantage to participate in this program if we in the packing industry set a good example. I would like to ask you retailers to help me a little by reminding your packer friends that this is a good way to improve our business. In other words, if you don't ask them, your communications are lacking.

LEFT: Crowded aisles of exhibit hall were familiar sight between Institute convention sessions. NP president Lester Norton (foreground, arms folded) is interested in presidential poll score taken by industry supplier. P.S.: Nixon won the poll. **RIGHT:** Photo provides a cross-section of meeting moods—happy, pensive and alert.



LUNCHEON for members of the sausage committee of the American Meat Institute is held in Crystal Room of Palmer House on Saturday afternoon. Throughout the September 16-20 convention the trade association sponsored 13 similar special meetings and luncheons.

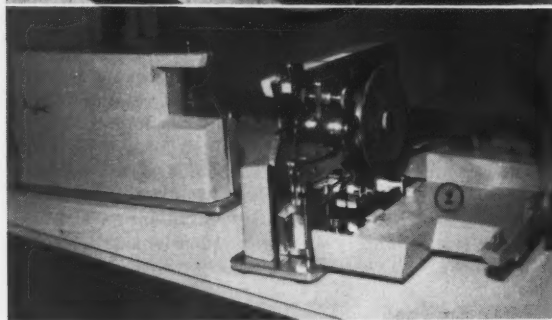
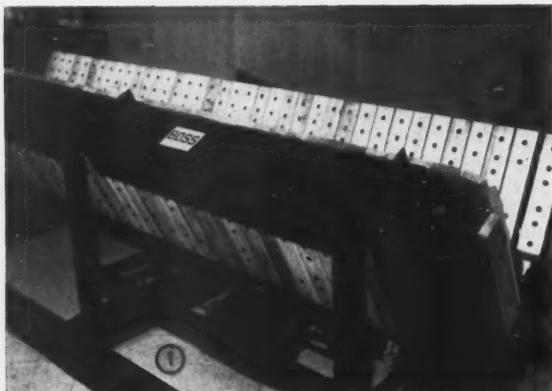


one of committee morning.

ER 1, 1960

New Equipment Review

NP's On-the-Spot Coverage of AMI Exhibits

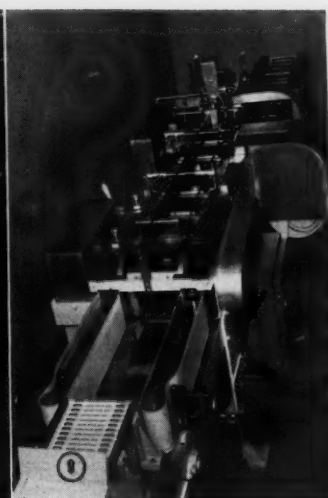
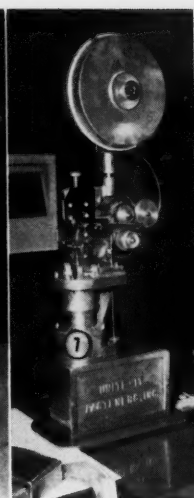


1. HOG RESTRAINER IS V-shaped restraining conveyor that supports animals in upright position for application of stunning instrument. Conveyors form self-contained unit and are equipped with individual drives and individual motors and starter. Unit, which is 14 ft. long and 6 ft. wide, is for any capacity up to 600 animals per hour. It accommodates large or small hogs with no adjustment. Unit is driven by two 1-hp. motors with one push-button starter. Conveying flights are of seasoned hard maple fastened to chain mounted on heavy structural steel frame. The Cincinnati Butchers' Supply Co., Cincinnati, exhibited this hog restraining device.

2. BAG AND CASING FASTENER is compact, rapid-action machine for applying both first and second end closings on artificial casings. Unit can be used for closure on all types of casings, such as polyethylene, mylar, saran, pliofilm, cellulose, fibrous cloth or similar packaging material; plastic or cloth bags; stockinettes, or even natural casings. Fastener, which reduces time required for closure cycle, can be moved easily to alternate positions on fastening bench. Claimed advantages are no loose fasteners to spill, no hopper filling, reduced storage requirements and easy cleaning. Unit has stainless steel and anodized aluminum frame housing. Maximum speed is 80 cycles per minute. The American Fastener Corp., Manasquan, N. J.

3. NON-MECHANICAL meat rail refrigerated trailer requires user to: 1) load bunker tanks with dry ice (up to 1,800 lbs.), 2) set temperature control to desired setting and 3) set brine temperature control to desired setting. Dry ice vaporizes (CO_2) and feeds into tank containing refrigerant which is forced out into another tank. This pushes cooler refrigerant already in this tank up through cooling coils located inside meat rails. Cold refrigerant absorbs heat inside trailer and returns to first tank ready to repeat cycle. Advantages are no lost space inside of trailer, no mechanical moving parts to break down and no lost time in inspecting and servicing en route. Experimental trailer was shown in conjunction with exhibit of Liquid Carbonic division, General Dynamics Corp., located in Chicago.

4. ELECTRONIC PUMPING SCALE pumps hams automatically with preset percentage of cure. Stainless steel unit pumps hams alternately by means of two separate needles. As one needle is pumping cure into product, the other is being inserted into artery of another ham. Function of scale is to "remember" green weight; it calculates weight of pickle to be put into product and turns off automatically. Unit has bed-bar type platter for holding meat easily. Tower section contains bag of



silica gel to prevent condensation by keeping humidity down. Damaged hams also are accounted for, eliminating lag in productivity. It is claimed that the unit will result in gain of 32 to 46 per cent in production per man. The Baltimore Spice Co., Baltimore.

5. **FRANK-LINE AUTOMATION**, using Cryovac L-500 packaging film and machine manufactured by Hayssen Manufacturing Co., Sheboygan, Wis., permits wrapping of more than 45 shrink-tight units per minute. Operation is completely automatic from infeed to discharge. Rewraps and floppy-packed units are avoided since film folds, shrinks and seals tightly, producing sturdy packages. Operation uses less film per pack—only 110 sq. in. of packaging film fully covers frankfurter package. Machine contains fewer moving parts to wear out or readjust; every part is accessible for easy cleaning. Operation was exhibited at booth of Cryovac division, W. R. Grace & Co., Cambridge, Mass.

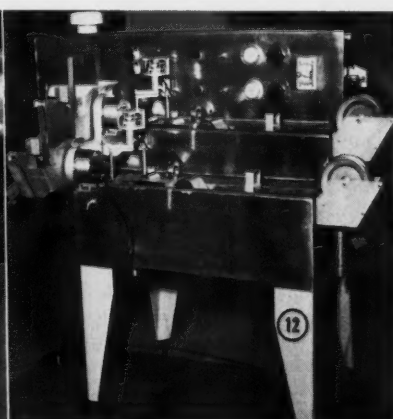
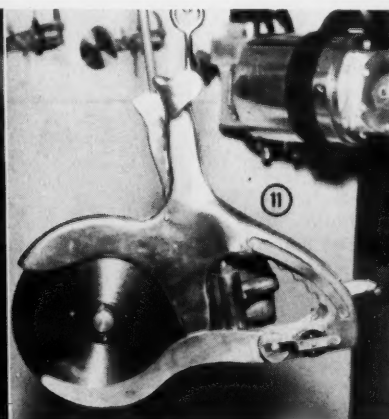
6. **LOIN RACK** is available from manufacturer either with legs and casters or for use with lift jack. Although unit is primarily a loin rack, it also can be used as flat-bed truck, fresh meat rack, etc. Mobile, collapsible rack permits economical storage, ageing and transporting of loins without multiple handling. Assembly has hot dipped galvanized finish. Shelves can be lifted off individually and later remounted. As needed, assembly can be modified with solid shelves or with other materials. Unit can be disassembled rapidly and is easy to clean. Koch Equipment Co., Kansas City, Mo.

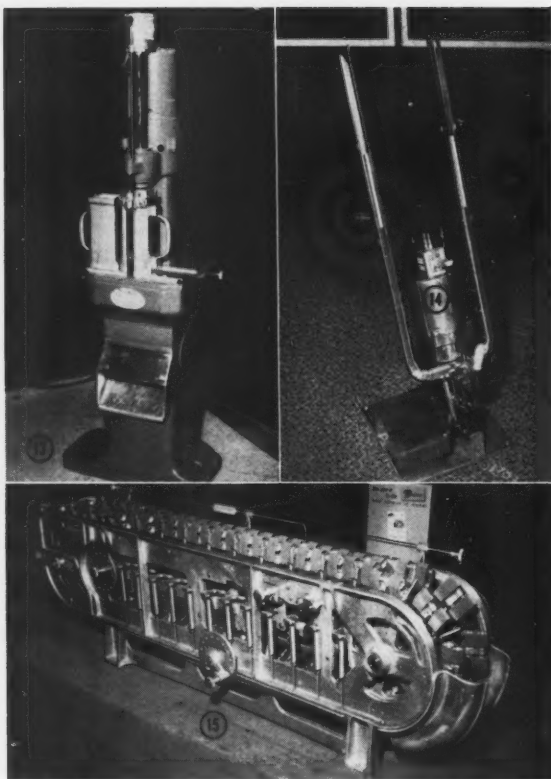
7. **CASING AND BAG CLOSURE** machine for first and

second ties is rated at 10,000 closures per reel. Unit applies air-tight, attractive, safe ties on casings and bags made of saran, pliofilm, polyethylene, cellulose, mylar and similar packaging materials. Continuous aluminum strip has plastic covering that prevents cutting or pinching of casing. Constructed of aluminum and stainless steel, machine has calibrated adjustment device for setting strip according to size of casing. Unit contains no loose fasteners to fall into meat products or spill over bench and floor. Casing closure machine was exhibited by Unite-It Fastener, Inc., Elizabeth, N. J.

8. **HOG BLEEDING** and automatic unshackling conveyor carries animal from stunning station through bleeding area and deposits bled hog in scalding vat. Heavy steel unit is carriage-type trolley on monorail tied up with conveyor chain. When animal is to be released, trolley strikes limit switch which activates air cylinder device. Then lift bar raises tube, causing slack in chain and thereby freeing hog. Advantages are easy installation, smooth performance and economy of operation and maintenance. The Globe Co., Chicago.

9. **AUTOMATIC BACON PACKAGING** machine is said to eliminate dewaxing problems with special coated style of bacon cartons. Tray is placed on infeed conveyor by bacon arrangers and carried by intermittent motion to station where carton, which has moved automatically with bacon tray, is opened and tray is inserted into it. After positive glue application with new process, cartons are carried into compression section which moves completed package automatically into shipping con-





tainer. There is no need to handle package after tray insert is placed on machine. Unit can handle 1,800 lbs. of product per hour. Packers Package, Inc., Muncie, Ind.

10. BULK LIQUID RECEIVER is used in CO₂ "blast chilling" process for instant refrigeration of trailers, rail cars and trucks. After carrier has been loaded and doors closed, controlled charge of CO₂ liquid is sprayed into its interior through special attachment connected to bulk CO₂ liquid receiver. System eliminates long after-loading pull-down period, minimizes product shrinkage and inhibits bacterial and spore growth. "Fresh killed" bloom of meat and meat products is said to be retained. Pure Carbonic Co., division of Air Reduction Co., Inc., New York City, exhibited this piece of equipment.

11. COMBINATION HAM AND SHOULDER marking and loin scribe saw is said to perform function of three individual saws. Loin belly scribing saw converts by touch of thumb on trigger fitted into handle to ham or shoulder marking saw. Unit is equipped with blade depth cutting adjustment guard to limit depth of saw blade for cutting through ribs only and to prevent disfigurement of bellies. Blade adjustment can be manipulated easily by operator with one finger to three varying depths. Unit is air-driven on standard pressure of 90 psi. and is equipped with 1 1/2-hp. motor. Weighing about 14 lbs., it is fully sealed for thorough steam-hose sterilization. Kentmaster Mfg. Co., Inc., Los Angeles.

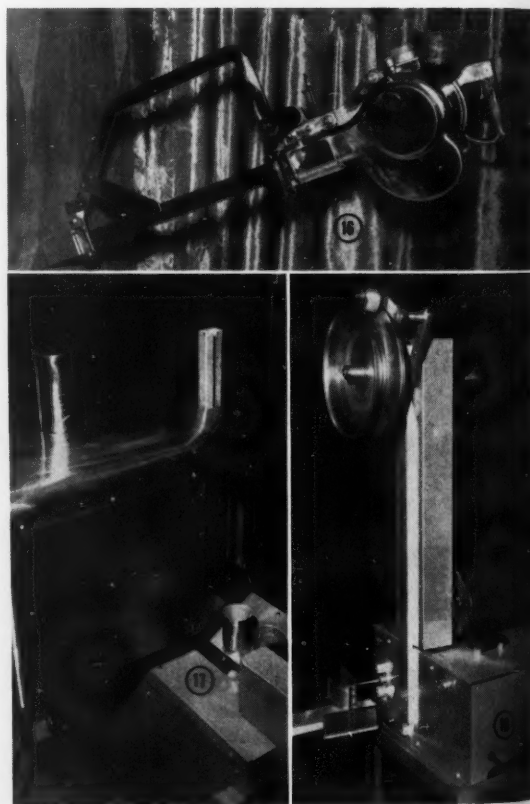
12. STRIPPING MACHINE, used in combination with firm's linker (not shown), reportedly simplifies controlling of package weights, producing more uniform sausage products. Stripper's twisting head removes twist and separates casing from all types of sausage. Controls are enclosed in watertight cabinet. Adjustments are available to handle sausage of various peelability characteristics. If needed, unit may be provided with conditioning tanks to prepare sausage for stripping.

Other advantages of two-unit combination are large production in limited floor space and low maintenance costs. Kartridg Pak Co., Mount Prospect, Ill.

13. DICING APPARATUS dices or cubes raw or cooked meats, frozen fats and partially frozen meats and produces wide variety of cubes or strips for meat stews, sausage, etc. Twin feed funnels, which are standard equipment on machine, provide semi-continuous operation. While unit dices contents of one funnel, operator fills other one. Occupying less than 1 1/2 ft. of floor space, dicer has 1/2-hp. motor; capacity is 250 lbs. or more per hour. Only corrosion-resistant metal parts come in contact with meat. Cutting blades are easily accessible, easily cleaned and durable. Werner Manufacturing Co., Yale, Mich., had this dicing unit on display.

14. CASING CLOSURE MACHINE applies two medium-size clips, 3/4 in. apart, with one closing of gate. Termed "Double Clipper," unit is specifically designed for multiple chub filling in which several packages are made in single length of casing. Chub packages are separated so they can be cut without overwrapping. Gathering action on casing is same as with firm's standard "Tipper Clipper" casing tyers. It is claimed that use of unit can result in gain in smokehouse and cooler space. Labor-saving machine is constructed of aluminum and stainless steel. Tipper Tie, Inc., Union, N. J.

15. AUTOMATIC SAUSAGE LINKER, which adjusts automatically to casing diameter, can produce up to 1,400 lbs. of pork sausage per hour and up to 2,200 lbs. of pepperoni per hour. Unit also twists wieners, Polish sausage and all other small sausage in full view of operator. Linker handles any diameter from 16 to 40 mm. in natural casing and any length from 3 in. and up, in 1/4-in. increments. Unit is said to be easy to install, handle and clean and simple to operate. It is available



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The remarkable new material
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- **Easy to Clean** — slick, glass-like, closed surface molded on matched dies to eliminate sharp interior crevices and corners.
- **Easy to Handle** — lightweight (only 3 3/4 lbs.), full perimeter, top-rim finger grips.
- **Easy to Stack** — special patented design for quick, easy stacking—empty or loaded.
- **Easy to Move** — in stacks or nests — on platform trucks or pallets — between processing operations.
- **Easy to Nest** — nesting stops minimize binding and gripping suction.
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Lower your handling costs with Lewis
PolyLewton Stack-n-Nest Tote Pans . . .
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to harbor undesirable
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National Hot-Carcass
labels save time,
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Hot-Carcass Labels

SLAP ON, STICK TIGHT, PEEL OFF CLEAN

National Hot-Carcass labels speed up work. You just mark 'em up and slap 'em on—they stick tight without wetting, fasteners, strings or staples. Later, they pull off clean—no gum or mess on the carcass.

Furnished in gangs of four for easy marking, these time-saving labels stick on the *outside* of the carcass where they're easy to see. The tough latex-impregnated paper lies flat . . . no metal to rip shrouds or ruin saws.

National makes super-tough, moisture-resisting, pre-numbered Head 'n Foot Tags, too, and offers special low prices on combination orders.

Try these labels and tags in your kill room for just one day. They'll prove their value. Just fill in the coupon and mail it today for a *free* supply. No cost or obligation.

The National Tag Company

344 S. Patterson Blvd., Dayton 1, Ohio

Please send me one day's supply of
Hot-Carcass Labels and Head 'n Foot Tags, free.

Our average day's kill is _____.

☐ Send full information and prices about
National's other stock tags for meat packers.



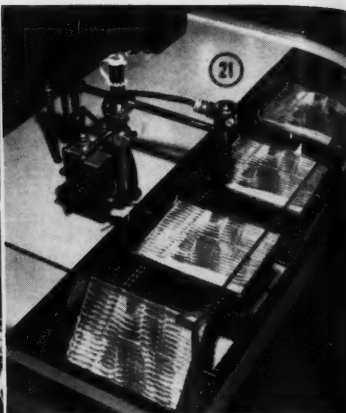
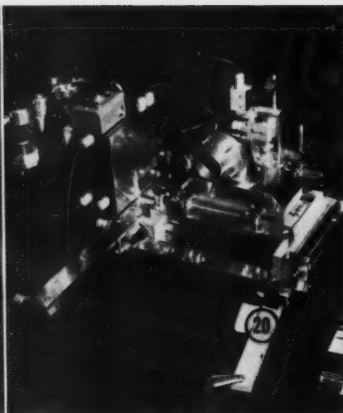
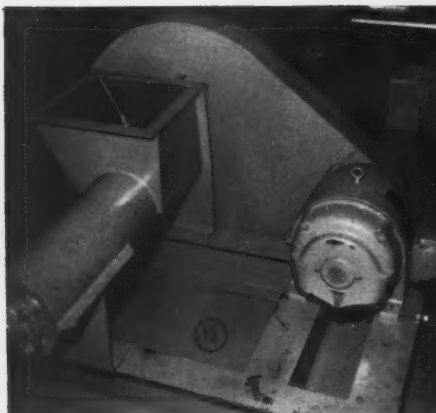
Name _____

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City, State _____



with or without automatic cutoff device which discharges sausage ready cut in single or multiple links for packaging. Famco division, Allen Gauge and Tool Co., Pittsburgh, was the exhibitor of this sausage linker.

16. RUMPBONE SAW AND CARCASS SPLITTER is combination unit that can be used with either stationary killing bed layout or with moving chain conveyor system. It is capable of splitting from 30 to 35 carcasses per hour, depending on size and age of cattle. Features include splash-proof motor housing, automatic safety switch, palm-grip handle, one-piece drop forged saw frame and ease in cleaning, greasing and changing saw blade. Twist lock cord connection makes it possible to remove machine from service without disturbing wiring. Unit is suspended from equalizing bracket or arm which can be moved to suit operator. Total length of unit is 54 in. Best & Donovan, Chicago.

17. PORTION CUTTER and depositor automatically slices and deposits portions directly into cans. Operating in direct conjunction with canning machines, unit slices fatback, bacon, beef, chicken and other food products. Fully enclosed unit automatically regulates slicing speed to conform with movement of cans and is adjustable for various can sizes. Speeds up to 300 cans per minute can be attained. Requiring little floor space, cutter lines up with existing conveyors and lines. It also can be used in making beef and other meat pies. General Machinery Corp., Sheboygan, Wis.

18. DESTRINGING MACHINE permits continuous operation from shaking to peeling of product. Stainless steel

unit performs shaking, stretching and twisting operations. Pressure guide wheel at top eliminates vibration of links as they move into stripping unit. Destringer can handle 500-900 lbs. of links per hour, depending on size of product. Speeds up to 90 ft. per minute can be attained, it is claimed. Machine, which contains 1/4-hp. motor, can be adapted to endless belt packaging. The Tee Cee Manufacturing Co., Cincinnati.

19. GUT HASHING UNIT produces uniform chopped product at high capacities (up to 12,000 lbs. per hour). Since unit has no knives to break or sharpen, maintenance is said to be minimized. Hasher contains 20-hp., 1,200-rpm. motor and "V" to "V" belt drive with pulleys, belts and belt guard. Simple operation reduces manpower requirements. Other features are increased efficiency of washing screens and low initial cost. Rietz Manufacturing Co., Santa Rosa, Cal., and West Chester, Pa., exhibited this machine.

20. MOLDING AND PACKAGING UNIT has been designed for rapid molding and packaging of patties, links, chops and ground or comminuted meats of all kinds. Automatic, air-driven machine is of stainless steel construction and operates at pressure of 100 psi. Easy-to-clean unit can be hooked up easily to any conveyor system and guarantees absolute weight accuracy. It can handle 100-120 patties per minute. Exhibited by Basic Food Materials, Inc., Vermilion, O.

21. SPRAYING DEVICE, which is said to spray exact amount of liquid on product at high speeds, has been tested and used successfully with ascorbic acid and

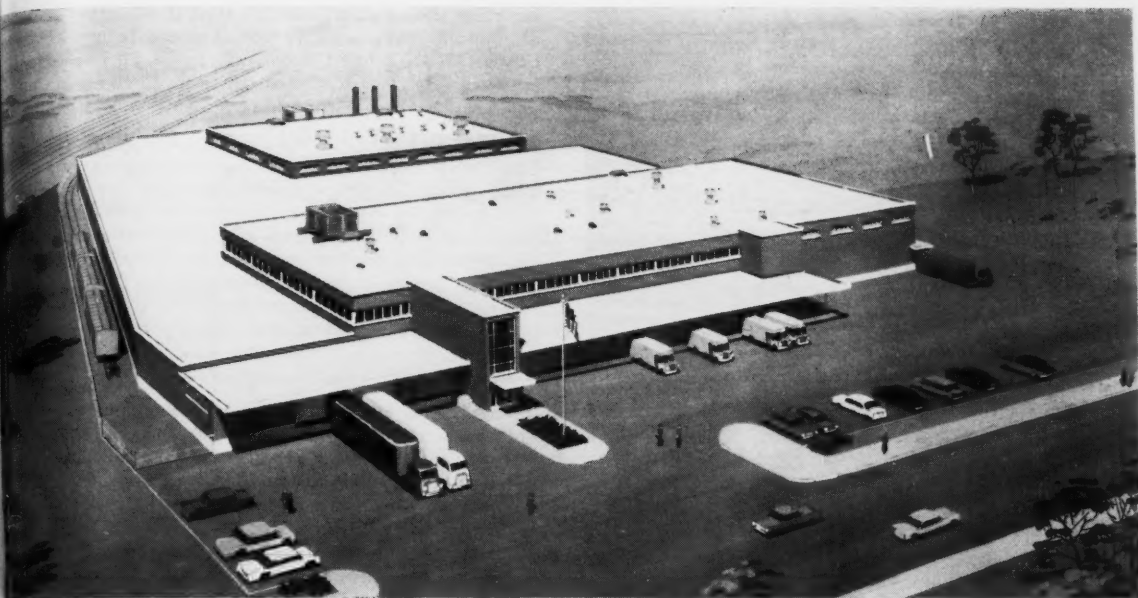


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New Processing Plant—STAHL-MEYER, Inc., New York, N. Y.

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MEATS**

Hams

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Gold Star Hams
(Extra Lean • Shankless)

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Luncheon Meats

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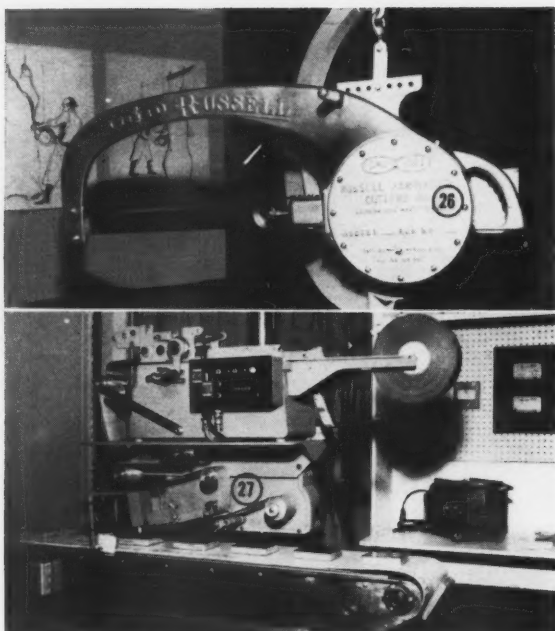
Chopped Pork

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Chopped Ham

THE KLARER COMPANY

LOUISVILLE, KENTUCKY



other liquids. Process combines pneumatics (to move liquid solution under pressure to spray nozzle) and electronics (to measure time intervals for each individual spray application). When spraying bacon, unit will allow spray on meat only and not cardboard. Micro-switch is tripped by passing of product on line which, in turn, sends electronic signal to control box. Box opens dispensing head which is supplied liquid under steady pressure from tank. Pressure in tank is maintained continuously by air pressure from plant supply. Morton Salt Co., Chicago, showed this equipment.

22. TANK CLEANER distributes hot or cold liquids in designed spherical pattern in either closed or open system. Since nozzles are driven in both horizontal and vertical planes, area to be cleaned is covered twice. Driving air motor controls rotating speed of head; speed is regulated by varying air pressure delivered to air motor. As little as 10 psi. at 5-10 cfm. or small 1-hp. air compressor may be used to supply compressed air. Available in stainless steel or bronze, cleaning device is completely automatic. Discharge pressure is 100-300 psi. and discharge capacity is 1,000-4,000 gph. Sellers Injector Corp., Philadelphia.

23. OFFAL BRANDER for livers, hearts, tongues and other offal products has thermostatic heat control which cuts burn-outs and heating element replacements up to 75 per cent. Unit also can be used on hams, bacon and other products requiring a burn brand. Weighing only 2½ lbs., brander reportedly increases speed of branding and reduces operator fatigue. Excessive scaling and corrosion due to overheating are eliminated. New clip attachment design permits changing and removing of brands easily without danger of damage to heating element. Unit is 11 in. long and uses 110-115 AC only. Maximum size of brand is 2 x 2 in. Offal brander was exhibited by Everhot Mfg. Co., Maywood, Ill.

24. CARBON DIOXIDE storage tank for CO₂ hog immobilization requires minimum of compressor operation to maintain standard storage temperature of approximately 0° F. Unit is enclosed in welded sheet steel, hermetically-sealed housing mounted on rigid channel iron base. Vaporizer and vapor heater insure constant supply of vapor at uniform pressure. Carbon dioxide is

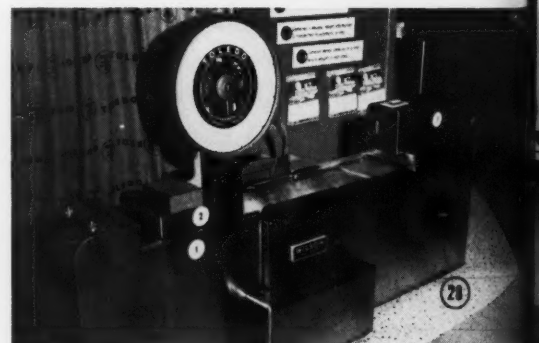
stored at pressures of 300 psi.; tank is protected against abnormally high pressures by multiple safety devices. Liquid CO₂ is pumped into unit through fill line extending from side of tank. Cardox division, Chemetron Corp., Chicago, had this storage tank on view.

25. AUTOMATIC CHECKWEIGHER, with vertical rejection for flat products such as bacon packages, has electrical controls mounted above conveyor line for maximum protection against spilled product and dirt. It can handle up to 120 weighings and classifications per minute, depending on size and weight of product. Custom-designed for packages weighing up to 5 lbs., unit is easily adjustable to user's requirements. Electro-pneumatic rejector system insures fast, smooth operation. Compact unit requires minimum space in conveyor line. The Exact Weight Scale Co., Columbus, O.

26. CARCASS SAW is available with 1-hp. single or three-phase motor and is designed to be used with overhead suspension assembly. Housing and bow are cast of high-tensile aluminum. All bearings run in oil in sealed case for quiet operation and long life without frequent repairs. Switch and all electrical parts are placed in sealed and water-tight containers for added protection. Saw blade, which can be removed quickly without opening the case, is of tempered alloy steel, 24½ in. long and 2 in. wide; it has four teeth to the inch. Unit will split carcass in less than 90 seconds without burning bone. Russell Harrington Cutlery Co., Southbridge, Mass. is manufacturer of saw.

27. IMPRINTING MACHINE feeds labels (in roll form) that are preprinted with constant information and imprints, by means of changeable rubber plates or movable type, variable information on label, such as weight, product name, contents, date, etc. Afterward, labels are fed in continuous roll through device that peels protective backing from pressure-sensitive labels and automatically applies them on package. Unit is adaptable to flat or cylindrical surfaces and is adjustable to any package size. Maximum label width that can be handled is 3 in.; maximum length is 7 in. Unit handles up to 180 labels per minute. The Monarch Marking Systems Co., Dayton, O., and Los Angeles.

28. WEIGHING AND IMPRINTING machine performs combination of operations in following steps: 1) conveyor moves container into position, 2) container is weighed and weight information is transmitted to auto-



matic printer and 3) conveyor moves container to printer where weight is imprinted. Depending on size of package and weight range, production speeds to 60 units per hour and higher are possible. Imprint of weight and/or date and code may be on end, top or either side of package. It is claimed that practically any type of container can be processed. Toledo Scale application was exhibited by Wilson Automation Co., Detroit, Mich.

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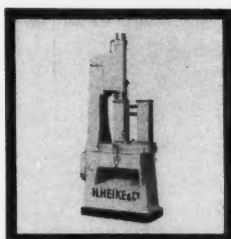
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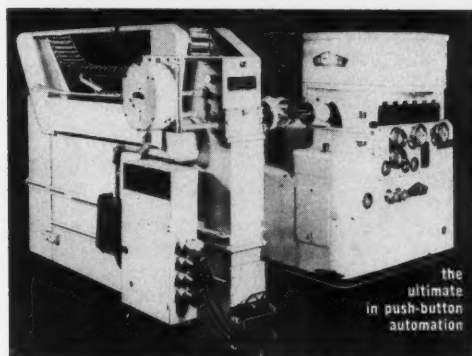
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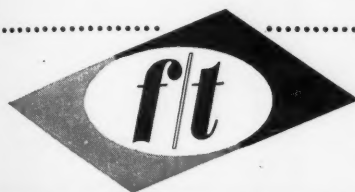


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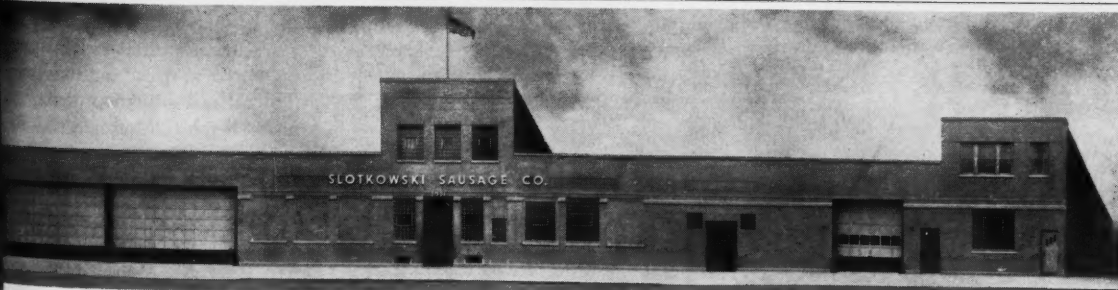
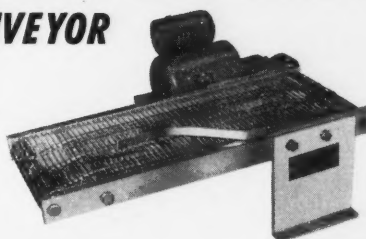
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Discussion of Loewy Report

[Continued from page 144]

an awful lot can be done. We put that as second priority in our list. I would like to comment on our first priority. I think that the fact that the AMI employed the Loewy company to make this study indicates that we were cognizant of some of our shortcomings in our relationships with the retailers and of our failure properly to communicate with the retailer. The Loewy report highlighted the fact that our efforts must be directed to the consumer, and I think that their finger was pointing at both the retailer and the packer.

However, our number one priority of the recommendations submitted involves the recommendation that we establish a better relationship between the packer and the retailer. I wish that they had gone a little further as to how that could be done. We in the sales and merchandising committee of the AMI are meeting regularly with retailers in an effort to try to improve these relationships. We think that a tremendous amount of work is yet to be done, but we are encouraged by the cooperation that we are presently getting from the retailers.

JAMES D. STIMPSON: The sixth recommendation is our number one priority, and I should like to comment on that after I tell you something about our feeling as wholesalers. Our objective is to help retailers sell more meat profitably. We don't put the emphasis on "more profitably," we just say "profitably." We certainly need the packers' help in doing this and we certainly welcome the packers' help. The feeling at our table was that the AMI and the packing industry are certainly doing a marvelous job at this stage of the game. We feel that the biggest room in the world is the room for improvement, and we think that you are certainly on a joint step toward improving relations with us as wholesalers and, of course, locally, with the retailers.

While we fully do not agree with the Loewy report in detail, we certainly are going to keep an open mind and welcome the new thinking that is brought about by such an organization.

Our number one priority is the sixth recommendation for a study of relations between packers and retailers, especially supermarkets, to discover and isolate causes of friction and misunderstanding and to develop methods of eliminating them. To understand our feeling on this particular recommendation is to

know that we, as wholesalers, are vitally interested in helping the retailer do a better job. It is our feeling that in a meat program approach to help the retailer do a better job, you would best work through us as a wholesaler.

All too often, a packinghouse representative will call on a retail store and tell a slightly different story from the one that we are being told as wholesalers. This causes confusion and definitely causes friction. While that packer representative is calling on one store and spending enough time to have called on us, who represent, let's say, 100 stores, we could have told the story 100 times, we believe, as effectively and we hope more effectively. We believe that the area of friction that might exist with retailers where a wholesaler is involved could be lessened considerably by working regularly and conscientiously through the wholesaler.

MODERATOR PHILLIPS: Are there recommendations that were not particularly attractive to you?

MOMMSEN: There was one recommendation about a code of ethics of the industry that caused some question in the minds of our committee as to just what the Loewy representatives were reaching for. Our feeling is that each business has to have a code of ethics in order to survive.

CHAPLICKI: I would like to comment on the fourth recommendation for "An industry study by an AMI committee of quality standards for fresh meats, processed meats and hams." Our group was unanimous in its statement that we do have quality standards for beef; they are known as U. S. grades. I believe that recommendation also contained something about the so-called ready-to-eat and fully cooked hams. I think that the AMI had a program a year ago with the intention of eliminating the making of the so-called ready-to-eat hams, but I don't think that this has been accomplished 100 per cent at the present time. It is a good move and our group believes that the AMI should go forward and see if it cannot get 100 per cent cooperation from the members to stop making the so-called ready-to-eat hams and, instead, to make what is known as a fully cooked ham.

STIMPSON: We had a discussion at our table on ethics concerning the packing industry, and we felt that the industry is very ethical. We did not choose to toss brickbats and say that packers are not ethical. We say that there may be a misunderstanding-

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ing as to what we mean by ethics. Is it a difference in formulation, in which perhaps one packer has more moisture in a ham than another? Therefore, I should like to know what we are talking about in this particular recommendation. I believe that the packing industry is as ethical as any.

(EDITORS NOTE: Cards were passed out to the audience and groups were formed to choose a question to help round out information on the material presented.)

QUESTION: Continual reference was made in the Loewy report to

"hamburger." Isn't it time we gave consideration, as an industry to calling ground beef, "ground beef" instead of hamburger?

LEWIS MILKOVICS, *Progressive Grocer Magazine*: In the Dillon meat study, there is not one instance in which we mentioned hamburger. We always referred to it as ground meat. I am well aware of that problem and had that in mind all the way through that study. (EDITOR'S NOTE: The *Progressive Grocer* study of the meat operation of a regional supermarket chain was presented in large part by slides so

the report is not carried in this issue of the *Provisioner*.)

CHAPLICKI: This question of ground beef versus hamburger has been thrashed out probably for years and years in the retail business. I think most chains decided years ago that hamburger was probably the best advertised meat throughout this country; their regular hamburger with 20 per cent fat was called "hamburger" and their leaner type beef with approximately 10 per cent fat was called "lean ground beef." Then, we have our so-called "ground round steak." We did believe in our own company, and I am sure other companies must have come to the same conclusion, that we would lose something by calling our regular product "ground beef."

SNAITH: This goes back to our study of nomenclature. Why not try to talk the customer's language instead of one you would like yourself? Look at all the hot dog stands and hamburger stands. They keep on calling it "hamburger." You may be perfectly right to call it ground meat, but if the customer persists in calling it hamburger for the moment, why not wait in the interests of communication?

STIMPSON: We fought that hamburger battle for about 35 years. We have from time to time run experiments on whether it should be called hamburger or ground beef. Some startling things have happened to us, and it wasn't good when we changed from hamburger to ground beef. We have seen sales drop off 50 per cent when we changed the name to ground beef.

QUESTION: What help is there in the Loewy report as we decrease profits in our industry?

CHAPLICKI: I am sure that our group yesterday found nothing in the Loewy report that would add to gross profit in our meat operations. I think the suggestions were good. There is a possibility that some of the suggestions could increase profit on certain items of certain tonnage, but we are pretty much in agreement that nothing in the report would raise gross profit.

SNAITH: May I reply to that. I continue to point out that everywhere we go we find out that what sells meat, the thing everybody is looking for, is lower price. Any time you have a market situation in which it is a lower price that sells a product, you are bound to get a lower profit. We say if you can grade up the NP on meat, if you are not selling on a lower price all the time, that if you can sell more of the



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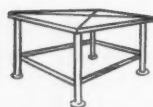


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animal, and sell it more attractively, you will get an increased profit. It is ridiculous to say that there is nothing in a report such as this that would increase gross profit when the point of it is to increase and improve the image of something on which you should be able to get a higher markup.

CHAPLICKI: May I take a whack at that. This chain store business of ours, both grocery and meat, came into existence on low prices, fair prices for Mrs. Consumer, and the day we get out of that trend, we will be out of the chain store business. Sure, there is such a thing as merchandising the meat cuts to increase gross profit. Some practices are sound. Most of them are not sound. They are not good for future business, and our meat departments are very careful about merchandising an item for increased profit.

SNAITH: I would like to go back to the facts we found out in the total SMI study. How many items in the supermarket does the supermarket really make a profit on? How many items are being carried as almost loss leaders? We say that giving a fair price to the customer does not necessarily involve the carrying of a loss leader.

CHAPLICKI: I don't know just exactly what we are talking about, but it seems to me that the chain retail meat markets and independents, as well, get out to sell a commodity like chicken. It has one of the lowest markups in the group. They sell chickens at cost or below cost, thinking it will bring customers into their stores, and it has. This isn't doing as well right now as it did two or three years ago, however, and marking up all the other commodities to offset the losses that the store takes on chickens is not good merchandising. I don't think a meat operation has to sell below cost nor talk in terms of loss leader. There should not be any such thing as a loss leader. If you can't get your money back from a product, why in the world are you buying it to resell to the customer in the first place?

ED SCHUTZ (Independent Grocers' Alliance): In the Loewy report, there was some mention of the fact that Mrs. Consumer misses the butcher behind the counter and what he did for her. Has there been any trend back toward service meats in any market? Here in Chicago, the trend is away from service meats, but a gentleman from Canada just told me that the Dominion Stores have all service markets except a couple that currently are turning

back to self-service departments.

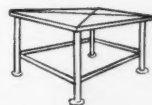
MILKOVICS: Our yearly record shows that the trend is in the other direction, more to self-service. Every year another 2,000 or 2,500 stores add complete self-service meat departments. Some operators are having bad success with self-service meats and they are going back to service. The trend in supermarket self-service meat departments, however, is to more service, setting up special order stations and other special sections in order to serve the customer better.

CHAPLICKI: I think the gentleman is right. Since the first Loewy

report made the magazines last January, a lot of our grocery people have said that maybe we are not giving Mrs. Consumer as much service as she should get in our meat departments. Our people, and I am sure those in almost every chain, have sat down and talked about whether we should correct this situation. We have service meat. All the customer has to do is ring a bell, and if the market manager is on his toes, she can get service. It is as simple as that. I realize that there are times when some of our people might not act as well as they should, but there is no reason to expect the



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service to be corrected with a man standing behind a service counter or behind a block.

I think in some stores we will put in a block or some means of serving customers. Our company has two self-service stores with service meat departments. The amount of sales in the service departments is very small compared to the total meat sales in the stores. I think going back to service or even talking about service for the future is just like going back 25 years. We are over the hump. We are going forward on self-service, and there is

no reason now to turn back and think we have to go to service. Don't forget, the grocery department did that 20 years ago. We were in and out twice.

STIMPSON: Yes, I think there is an area of misunderstanding on this. Actually, the service butcher is what has caused self-service to progress as it has over the past 15 years. The Loewy report stated that customers are dubious of the other side of the meat in the package. That has been true ever since there has been a meat man. He has always hidden the other side. Of course, self-ser-

vice has tended to make that meat man more honest, and I think he is essentially honest today.

I believe the Loewy report could do us a great favor by de-emphasizing the points about service from the standpoint of a service meat case being in the lineup, but stressing personal contact instead.

SNAITH: I think our report stated that while the consumer wants service, it is perhaps impossible ever to bring it back. It is uneconomical. I think those are the facts of life, and so what must be developed is some kind of layout, some kind of presentation that makes the service, when it is desired, more responsive to the customers' needs. I don't think anybody is talking about going from self-service to whole service.

MODERATOR PHILLIPS: I guess from this you mean service in the midst of self-service.

SNAITH: The practice is basically self-service.

H. BLAIR BARTELSON, general sales manager, Swift & Company: The report mentions the consumer lack of knowledge of meats and the lack of confidence in quality and the package's appearance and so forth. Is there a way for a cooperative attempt between packers and retailers to get reliable packaging, to get a kind of quality description of standards that the shopper will accept and understand?

MOMMSEN: The packer group had quite a discussion on this particular subject. We feel definitely that there is considerable effort that is being put forth in the standardization of names of certain meat cuts, such as referring to a "chuck roast," rather than just "chuck." Our committee feels that a lot can be done in the direction of calling these "pot roasts" and "oven roasts," using terms that the housewife understands, instead of telling where the particular cut of meat comes from, because that doesn't really mean much to her.

DR. KRUGMAN: I would just like to remind you that the material we found in the Roper study is from 20 years ago, which is quite a long time, but it does show that what the individual received from the butcher in the way of advice was reassuring and that the butcher had in mind less of a price orientation. I think that today we must find a way to provide the same kind of assurance and confidence that the housewife some 10 or 20 years ago had in her butcher.

QUESTION: In the Loewy report, it was stated that brand names are not gaining ground, especially in the



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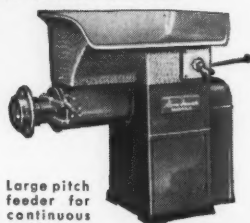
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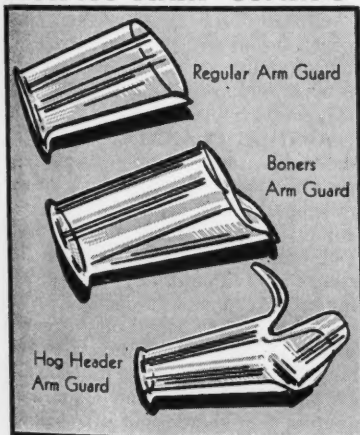
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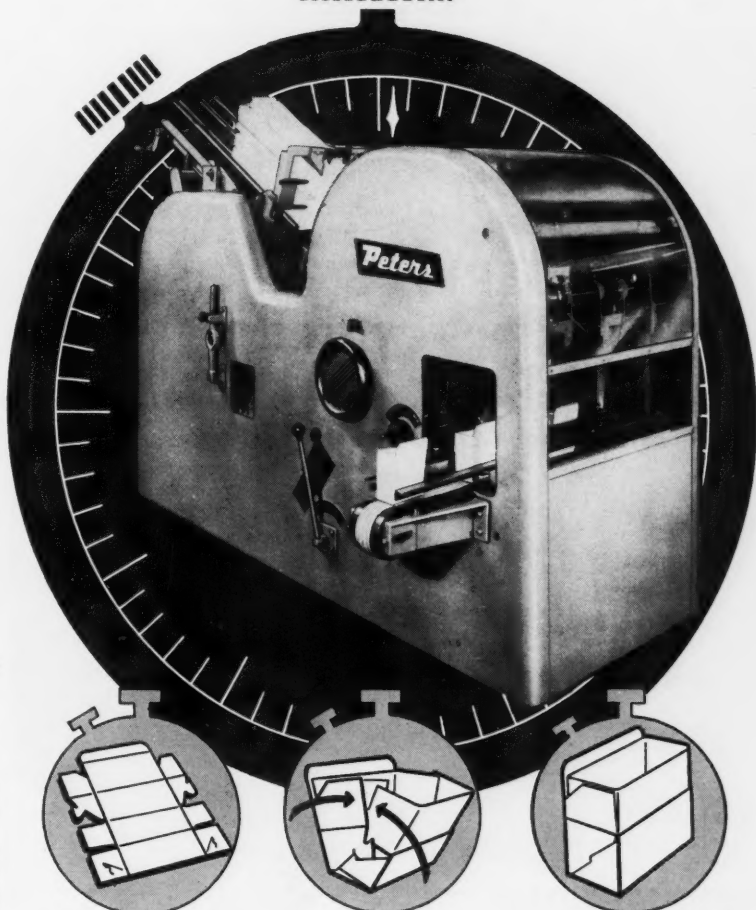
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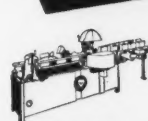
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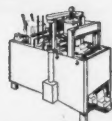


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sausage line and prepackaged meat. Our group wants to know: Why don't brand names build confidence in meats as they have been doing in grocery items?

DR. KRUGMAN: This is not something we said but a quote from one of the people we interviewed, so I will have to try to express the remarks of that particular person we quoted. Two points were involved. One is that insofar as fresh meat is concerned, there is nothing about the meat that can consistently be associated with a particular brand; that is, the quality is too variable. In the

area of processed meat, the explanation given by the person quoted was that the nature of the formula was varied so much to meet taste tendencies that over a period of time there was a decline in the identity of the particular brand of meat product.

Again, that was just an opinion that came out in the interview. Whether this is so, I don't think we are capable of saying. Perhaps someone else on the panel can comment on that point.

MODERATOR PHILLIPS: Is there any study or factual evidence

that can be brought to bear on this particular question?

CHAPLICKI: I certainly do not want to get into this, but I do think I would be wrong if I did not. I think that chains began selling their own brands of sausage because of the need for chains to be able to advertise at competitive prices and make at least some kind of profit. At least, that was the reason that National Tea Co. went into its own brand of sliced sausage and sliced bacon. We don't believe that it is a good thing; we think that it would be better for the packers to do this job. However, when your largest competitor can out-advertise you and still make a profit and you have to pay to the packer the prices that he is selling the product for, it makes it awfully easy to make a decision to go into your own brand of meat products.

MOMMSEN: I guess that this may be a dangerous question for me to get into. I will have to preface my statement by the fact that we did not discuss this in our committee yesterday so I will not hold those fellows responsible in connection with any statement I make. However, I certainly feel that the packers have a tremendous opportunity for building their own brand names. I think the packers have not done an outstanding good job of marketing. I think that we have a lot to learn in the field of marketing. We have to start with the consumer and work back to the product rather than starting at the product and working to the consumer. I think if we packers will do a good job of advertising and marketing of products, we can sell and will sell national brands.

CHAPLICKI: The private label sliced bacon was brought on by the packers, themselves. They could stop it by simply not selling to these non-slaughtering processors.

ARTHUR PLANNING, Dale Fish & Co., Canton, Ohio: The Loewy report indicated that there is a strong awareness on the part of the consumer of government graded beef. Does not the retailer sacrifice his store's individuality by concentrating on government graded beef?

CHAPLICKI: The Loewy report dwelt at length on the fact that Mrs. Consumer shopping in the modern meat markets is not assured of quality, that she doesn't know quality when she sees it and we do not have our meat packaged with sufficient information. I can tell you that Mrs. Consumer is reading the magazine articles and she knows that she, when buying government graded beef, is getting the best type of meat that her money can buy. One of the

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BLADE DEPTH
ADJUSTMENT
KNOB

FINGER
GUARD

HAND PRESSURE
INSTANT START & STOP LEVER

ONLY

\$290⁰⁰

WEIGHT
4 lbs. 6 oz.

OVERALL LENGTH 12"



Scribing half beef with Jarvis Scribe Saw at Raskin Packing Co., Sioux City, Iowa. Note one-hand ease of operation.

FASTER MORE ACCURATE SCRIBING

Due to high speed blade and light weight, scribing is faster, more accurate.

BETTER PRODUCTION—LESS FATIGUE

Weight of a balancer or electric motor is eliminated. Operator scribes with more ease, increases his production.

ONE-HAND PORTABILITY

Eliminates clumsy, tiresome 2-hand scribing. Improves accuracy.

ELIMINATES BONE SPLINTERS AND MISCUTS

*Interchangeable with Jarvis Air Dehider.

FREE Trial Unit Available Send Coupon Now



JARVIS CORPORATION—GUILFORD, CONN.

☐ Send Saw On Trial ☐ Send Literature

Name

Company

Street

City & State

reasons for the great increase in the chains' retail meat business is the confidence that Mrs. Consumer has in government graded beef.

DR. KRUGMAN: Just one of the quotes from a report yesterday is that 44 per cent of the people in a fairly large study could not name a federal grade name.

QUESTION: Our group concentrated its discussion on nutritional phases. While we realize that we, as individual packers, cannot tell our story to the consumer through advertising, we do ask this question: How can the individual packer incorporate nutritional themes into fresh meat merchandising through the retail store?

VERNON D. BEATTY, AMI advertising consultant: I would say that the best way that might be done, starting tomorrow morning, would be to encourage your retailer and supply him with information and tools with which to make more money out of fresh meat by featuring it at the point of sale and in his advertising. I know that is not an adequate answer to your question, but I cannot think of another at the moment. Perhaps someone else has an answer.

DR. KRUGMAN: One of the slides yesterday showed you a high protein table. That was just one little example. However, there are many variations to this.

DR. PHILLIPS: Your questions are recorded and if not answered, they will give stimulus for thought at another time.

C. T. HUESINKVELD, manager, training department, Armour and Company: This question was proposed by one of our group. What, if anything, should the retailer reasonably expect from the packer in the way of cooperative advertising and/or merchandising allowances on brand name items?

CHAPLICKI: Very frankly, I wish that the packers would live up to their rules that they have had for so many years and quit breaking them down. There is no reason for you to give a retailer an advertising allowance for the purpose of selling your merchandise.

MODERATOR PHILLIPS: As I have heard for the past two days, we need to sit down and get our communications in order. I would like to add that 280,000,000 people have lived in the United States since Plymouth Rock, and 180,000,000 of those people are alive. We have lost 100,000,000 by death since Plymouth Rock, which we will replace in the next 20 years.

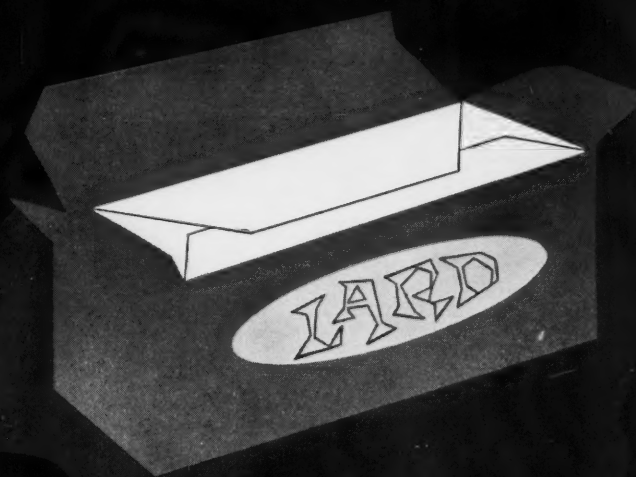
We are going to be stretching out

If you're packaging lard...

you'll want to know about the new

LIGHTWEIGHT LARD-LINER

Lard-Pak



Features of the new Lard-Pak

- ▶ Excellent greaseproof protection
- ▶ Clean, high-white color
- ▶ Excellent opacity ▶ Low cost
- ▶ Anti-crawl treated

Try Ripco's new 27 lb. lightweight Lard-Pak for your lard packaging... specially designed for one-pound lard carton liners. You'll be agreeably surprised by the handling, appearance, and protection of this new greaseproof paper. Just drop us a line, or send the coupon below and we will send you a sample of Lard-Pak for your inspection.



**RHINELANDER
PAPER COMPANY**

Rhineland, Wisconsin
Division of St. Regis Paper Company

Rhineland Paper Company
Rhineland, Wisconsin

Gentlemen:
Please send trial sample of Lightweight
Lard-Pak.

Name

Title

Firm

Street

City Zone State

plenty and business is going to be stretching out plenty as it grows, too. We recognize the absence of communications within our own industry and work hard to get it, but I am afraid that too often we have neglected the other side of our industry, our approach to the public. I invite you to remember that the biggest common job we have is communications within and without the industry. I would fail if I did not quote Clarence Randall:

"If each businessman would come to hold the deep conviction that the perpetuation of the system itself has first priority on his talents, public

opinion would have to come his way overnight. Our blind spot as businessmen is our failure to sense compelling personal responsibility for the perpetuation of that system. Christianity was not carried to the heathen by atheists, nor communism to the satellites by capitalists."

AMIF's Wilson to Speak At Smoke Curing Seminar

Dr. George D. Wilson of the American Meat Institute Foundation, Chicago, will discuss flavor and odor characteristics of frankfurters as affected by the method of smoke pro-

duction at the Danzig Polytechnic Institute's second international seminar devoted to "Advances in the Engineering of the Smoke Curing Process" in Danzig, Poland, November 15-19.

Dr. Wilson also will speak on the status of industrial smoke curing application in the United States at another session of the five-day meeting which will feature presentations in English, Russian and German. Each session will be conducted by a participant from one of the countries contributing to the scientific program being presented at the polytechnical university.

Other scheduled topics include: the influence of curing smoke on various microorganisms; problems of color development in smoked food products; mechanisms of smoke deposition; the quality of smoked products as influenced by smoke ionization; the quality of animal products smoke-cured by conventional, electrostatic and immersion methods; the application of liquid curing smoke in the production of cooked sausage; two-stage canning with the help of electrostatic precipitation, and observations on electrostatic smoke precipitation units.

Scientific demonstrations will be held in the laboratories of the university's department of animal products technology. Exhibits will include smoking equipment and control instruments from different countries and publications dealing with the smoke curing process.

State Officials Urge One Food Regulatory Agency

Resolutions aimed at bringing better food to the American public and improving the economic status of the farmer were adopted by the annual convention of the National Association of State Departments of Agriculture in Denver.

One resolution called for vesting the legal responsibility for regulation and inspection of agricultural products in agriculture departments exclusively, instead of among various other agencies. This resolution said that farmers and agricultural agencies realize their obligation to provide wholesome food, and a single agency can best regulate and inspect the industry.

In another resolution, the convention asked Congress to consolidate regulations on meat and poultry inspection, pesticides, milk inspection and plant and animal disease control in the USDA.

The association also expressed concern over declining competition

MAJOR DISTRIBUTOR... PACKING HOUSE PRODUCTS

Serving the entire Eastern Seaboard through selected wholesalers and retailers.

.....WE BUY.....WE SELL.....



PORK

VEAL

BEEF



DRESSED HOGS
CANNED MEATS
OFFAL



Direct door-to-door service
in trailer and less-than-trailer
quantities in our own fleet of
modern refrigerated trailers.

A completely integrated
and controlled operation.

..... May we tell you how Tynan Service can help you?



William E. Graf
Tampa Cold Storage Bldg.
Tampa, Fla.—Phone 4-1908

76 Ninth Ave.—N. Y. 11, N. Y.
Teletype N. Y. 1-3001
Phone ORegon 5-7110

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in the purchase of farm products and urged Congress to take steps to investigate and act to prevent monopolistic practices which are "jeopardizing the economic welfare of many farmers." This resolution was directed at chain stores and other large operations that buy large quantities of farm products.

Other resolutions asked for more funds and research to control and eradicate livestock diseases, particularly mastitis, tuberculosis and brucellosis. One recommended that states prohibit the use of live hog cholera virus and asked that states bar interstate shipment of swine so vaccinated.

International Packers' Net Is Lower for Six Months

While sales of International Packers, Ltd., Chicago, showed an increase for the first six months of 1960, consolidated earnings declined to \$2,881,654, or \$1.01 a share, from \$5,004,010, or \$1.80 a share, in the comparable 1959 period, H. H. Luning, president, and A. Thomas Taylor, chairman, reported recently. Consolidated sales in the six-month period ended June 30, 1960, amounted to \$197,985,818.

The decline in earnings was attributed by Luning and Taylor in part to labor difficulties in Argentina in March and April, when no operations were possible during a strike.

"The cost of the strike to the company was substantial," they noted. "On the other hand, important future benefits are expected through reduction in operating costs. Additionally, livestock supplies were unusually light, cows in particular being scarce due to a concerted effort by producers to build up their herds, which should have a beneficial effect in the years ahead."

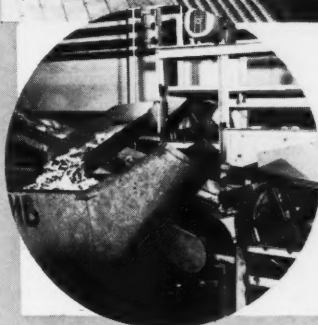
In Australia, the executives reported, a loss was incurred "as cattle offerings were moderate and competition excessively aggressive."

Parent company net income for the first six months of 1960 was \$1,997,480, including \$1,013,990 received as dividends from foreign subsidiaries. A year earlier, the half-year net income was \$2,147,221, including dividends of \$1,229,591 from subsidiary firms.

"We are pleased to report further substantial progress in coordinating the activities of the Swift and Armour units," Luning and Taylor said, "and a material expense saving is currently being achieved, especially in Argentina and Brazil. The implementation of the Argentine modernization program has now commenced

SANDVIK STAINLESS BELT CONVEYORS

help cut meat processing costs to the bone



Ham boning operation in the John Morrell & Co., Sioux Falls, S. D. plant uses two Sandvik stainless belt units. Lower unit carries hams along work table. Upper unit carries bones.

Bones are discharged from upper Sandvik conveyor down chute into cart. Boned Morrell hams are discharged from lower Sandvik unit to separate inclined conveyor which carries them to ham carts.

Here is another successful meat packer insuring continuous processing efficiency and minimum maintenance with a Sandvik stainless steel belt conveyor table.

Reasons:

EASY TO KEEP CLEAN—Boiling Water or live steam can be applied directly.

HARD, SMOOTH STEEL SURFACE—Cannot be cut or torn by sharp bone edges. Stays impermeable.

LONG SERVICE LIFE—High strength and resistance to time and wear.

AVAILABLE IN STANDARD UNITS OR ENGINEERED TO FIT APPLICATION—Portable or stationary units in lengths and widths to suit requirements.

Contact your nearest Sandvik office.

SANDVIK



STEEL
BELT
CONVEYORS

SANDVIK STEEL, INC. STEEL BELT CONVEYOR DEPT.

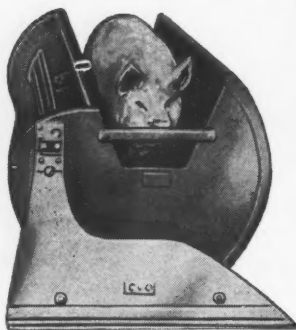
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Manufacturers of Steel Belt Conveyors for Over 40 Years

SS-224

Portable Schermer Hog Lift and Humane Stunner



The portable Schermer Hog Lift, in combination with the Schermer Stunner, is the most economical, humane slaughtering device in the industry!

Hog enters lift and then his forelegs automatically operate a spring that causes the bottom to drop. Now the hog is in a firmly wedged position and cannot move.

After the hog is stunned with either one of the Schermer Humane Stunners, the lift is tilted by operating a side lever, and the hog is ejected on to the floor or a conveyor system. Lift and hinged bottom then automatically return to original position.

OVER 200 HOGS PER HOUR CAPACITY.

NEW SCHERMER ONE SECOND ELECTRICAL HOG STUNNER

Plant tested. Complete unit \$450.00. No restrainer or other accessories needed.



**ONLY SCHERMER
FOR STEERS,
COWS, BULLS, HOGS**

**FOR CALVES,
SHEEP AND HOGS**

manufactures a complete line of mechanical and electrical humane stunning devices of specialized design for every purpose. use genuine Schermer Model M. E. Penetrating type captive bolt stunner with or without long handle (see right) use the new Schermer humane Knocker with a captive mushroom head. Stuns instantly without penetrating the skull.



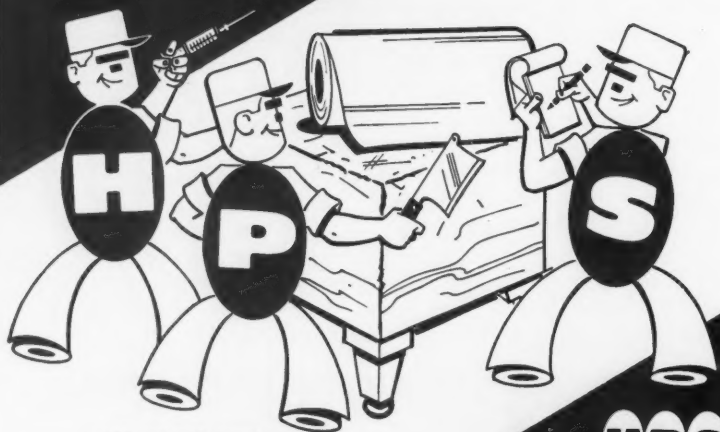
Only when buying Schermer will you profit from over 30 years experience in building humane electrical and mechanical stunning devices. Save money. Investigate now, phone, wire or write to

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PAPER IS OUR MEAT!



HPS men work it over, so it has what packers need to give their products the best protection possible. Let us know your needs...

HPS
H·P·SMITH
PAPER CO
CHICAGO 38

with early shipments of new equipment either arrived or afloat."

The executives pointed out that International Packers has no investments in Cuba, where recent events have focused public opinion on Latin America, and added: "We are pleased that our company's activities in that area are centered in Argentina and Brazil, where more favorable political and economic conditions prevail."

AMI President Reports Strong Retail Support for Meat Nutrition Promotion

The nutritional value of meat which many packers have been emphasizing during the past year in brand advertising, packages and point-of-sale materials, is beginning to receive strong supplemental support at the retail level, notes Homer R. Davison, president of the American Meat Institute, Chicago.

He points out that an article in the August issue of the IGA Grocergram, the widely-circulated company magazine of the Independent Grocers Alliance, tells of the steps that meat packers and processors have taken thus far to promote meat's nutritional superiority and urges meat department managers in IGA stores to join in the promotion as a means of increasing their sales volume on meat and related items.

"In the upcoming months," the article says, "IGA advertising will begin to place more importance on the nutritional value of meat." IGA meat department managers, however, are advised to become active once in the promotion by talking about meat nutrition to customers by using hand-made signs (for which suggested copy is supplied in the article), and by displaying point-of-purchase materials "which can be obtained from meat packers."

"Endorsement of the AMI's nutritional program by the Independent Grocers' Alliance is very significant because IGA is the largest voluntary group of retail and wholesale grocers in America," Davison observes. He says that similar reactions have been expressed by representatives of many other retail groups, including individually-owned stores, corporate chains and other voluntary and cooperative groups with which the AMI sales and merchandising committee has held conferences. More endorsements of the kind given by IGA and more support at the retail level of the meat nutritional theme are predicted in the months ahead.

"I am confident AMI members will

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continue to set the pace in this important program by using messages regarding meat's nutritional values in their brand advertising and in other promotional materials," Davison comments.

The AMI president also reports that large display pieces that strongly emphasize meat's important role in the planning of tasty and nutritious meals are being developed by the National Association of Retail Grocers of the United States (NARGUS) as a major promotional project for 1961.

Arrangements have been made for members of the American Meat Institute to take part in the NARGUS "Mealplanner" program by purchasing the display pieces to distribute to their retail outlets or to other interested groups, such as schools, home economists, food editors and commentators, homemaker clubs and other organizations in their respective communities.

Plan Carefully for 1961, Cattle Feeders Advised

Cattle feeders were cautioned recently by John H. Litzelman, Vermillion, S. D., president of the National Livestock Feeders Association, to take a very careful look at the whole cattle and beef situation as they plan operations into 1961.

"Cattle feeders cannot afford to pay prevailing prices for feeder cattle and sell them on a fed market equal to present levels," Litzelman said. No one knows exactly what the fed market level will be in 1961, he pointed out, but "with the number of cattle on hand and apparently in the inventory, it seems unlikely we will experience any strength in the general level of the fed market next year."

While predicting fairly stable fed cattle prices for the balance of 1960, the USDA also forecasts a drift toward lower fed cattle prices in 1961, Litzelman noted. A decided increase in beef production is expected, both in total volume and per capita production.

"Our records show that fed cattle selling today are losing money in most cases," Litzelman added. "Many feeders cannot stand another year without profits, nor can they afford to just break even. The marketing pattern is different this year than it was last fall. Last year at this time, a lot of cattle had been contracted and thus were not in the 'for sale' category when the heavy delivery period arrived. This year, very few cattle are under contract, which means that a higher percentage of

the cattle will still be on the market when the delivery season really gets under way. Each individual feeder should make his own analysis of next year's fed market, and by using careful cost data on his own operation, he can determine reasonable limits beyond which he may not wish to go."

Lamb Promotion Will Pay, Says Duluth Meat Retailer

Roland Everson, meat director for a group of IGA stores in Duluth, Minn., wrote a note of thanks to the American Lamb Council recently

and noted that since March of this year 22 IGA stores in his group had sold a total of 53,000 lbs. of lamb.

"And they try to tell us lamb won't sell in northern Minnesota! We firmly believe the beautiful display material you have made available has encouraged our accounts to push lamb more often," he said.

Cold Storage Hide Stocks

Hides and pelts held in cold storage on Aug. 31, totaled 75,040,000 lbs., according to the U. S. Department of Agriculture. This compared with 63,970,000 lbs. in 1959.



WHATEVER YOUR LOW-TEMPERATURE INSULATION NEEDS UNITED CAN SERVE YOU

From engineering design to final installation in CORKBOARD or EXPANDED POLYSTYRENE

United's patented process BB Corkboard is the long established, job tested insulation material. Block baked of 100% cork with no fillers or binders, it has a low K factor, is fire retardant, insect and vermin resistant.

Equally effective is Uni-Crest expanded polystyrene, United's newest development in insulation materials. This modern, lightweight, snowy white material, composed of minute, individually closed cells, has a low K factor, low moisture absorption, and retains its insulating value indefinitely. It is strong, flexible, easy to handle and inexpensive.

Experienced engineers, at United's branch offices coast-to-coast, offer complete consulting and design ser-

vice on both cork and Uni-Crest installations. Each installation is specifically planned to meet requirements of the job. Skilled crews, working out of these same offices, carry out the entire job of erecting insulation under direct supervision of engineers responsible for the design. In this way you are assured of undivided responsibility for performance of the entire installation.

Both Cork and Uni-Crest are available in a wide variety of sizes in board and pipe covering form. In addition, United provides cork lagging and discs for tank and filter application, as well as a self-extinguishing board and pipe covering of Uni-Crest. Write for more complete information.



UNITED CORK COMPANIES
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5 Central Avenue, Kearny, New Jersey
Branch offices or approved distributors in all key cities

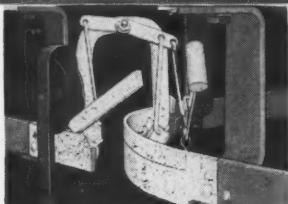
Save labor, speed handling, enjoy trouble-free service with



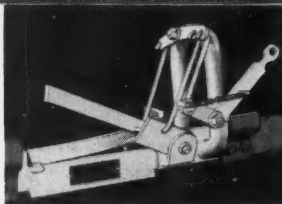
ALL-STEEL SWITCH

For new plant layouts or to modernize old, look to LeFiell for overhead track switches to handle any switching problem with superior performance. LeFiell makes switches on an entirely new principle. LeFiell all-steel switches are designed to give smooth, positive operation whether automatic or by hand. There are models to fit either flat or round

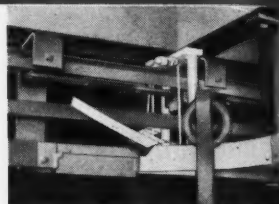
rails. The unique LeFiell design results in a tremendous saving in installation time — so great, in fact, that LeFiell switches frequently cost less installed than so-called "less expensive" switches. Select from various types to fit any track layout. Don't buy any switch until you check the features of the finest — LeFiell. Write today for full information.



AUTOMATIC — Entirely eliminates manual operation in gathering to common headrail. Approaching load actuates proper rail into position. No levers to pull, no stopping, no dropped loads.



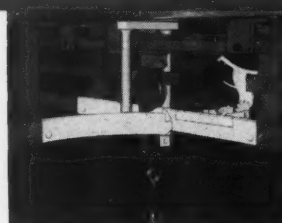
AUTOMATIC with direction selector — Handles back-switching either to or from straight or curved track, depending on position of lever, without necessitating manual switching.



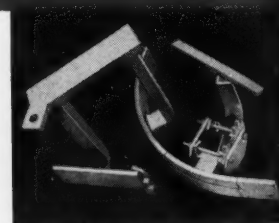
AUTOMATIC for drop-finger conveyor system — No more hand switching, all switching time saved, no delay in feeding conveyor. Mechanism above conveyor chain — no jamming.



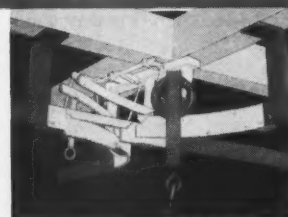
GEAR-OPERATED — Trouble-free and rugged. Switch is always fully closed or fully opened. Safety stop moves into place on one track as the other is opened, preventing dropped loads.



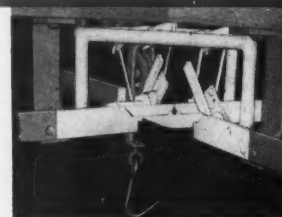
GEAR-OPERATED for drop-finger conveyor system — Built with extended heavy steel yoke which adequately clears conveyor chain and holds switch in permanent alignment.



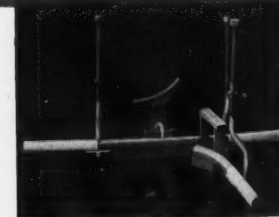
GEAR-OPERATED BLEEDING RAIL — Same patented advantages as LeFiell Gear-Operated Switch. Made of heavier construction for use with $\frac{1}{2}$ " or $\frac{3}{8}$ " x 3" rail and 14" hangers.



THREE-THROW — Completely automatic when trolley approaches from any of three branch lines. Three-position operation handle directs traffic to any branch line. No dropped loads.



AUTOMATIC CUT-THRU — For tracks at right angles. No operating handle. No safety stops necessary with exclusive new LeFiell design. Completely automatic. Easy installation.



ROUND RAIL — All-steel, all-welded. Permanent alignment because point is firmly held by heavy steel yoke. Works well with pipe rail or cold rolled steel. Same features as Gear-Operated.

IF IT'S A LEFIELL ALL-STEEL SWITCH IT'S THE FINEST

SWITCHES

**Features that make
LeFIELL Switches
the best and most
efficient you can buy**

• **PRE-BUILT TO FIT.**

No curves to bend, no fitting required, no holes to line up, no corner blocks needed.

• **PERMANENT ALIGNMENT.**

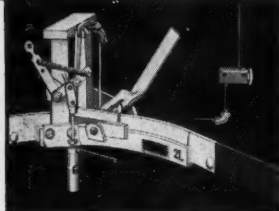
Exclusive heavy steel yoke holds point in rigid alignment vertically and horizontally. Nothing can break or get out of line.

• **ALL-STEEL CONSTRUCTION.**

LeFiell switches never break or require maintenance. Made of tough, long-lasting steel, they are "good for the life of the track system."

• **EASY INSTALLATION.**

You can actually save 75% installation time with LeFiell switches because only simple cutting of track ends is necessary. Three track hangers support switch and ends of track bolted into permanent alignment.



SWITCH WITH REMOTE CONTROL MECHANISM - Has air-operated cylinder controlled by push-pull button mounted in any convenient place. Bleeding rail and other LeFiell switches can be supplied with this remote control feature. Electrical control also available.

**Forged Steel
Track Hangers**

Sturdy single heel-type, made of $\frac{1}{2}$ " x $2\frac{1}{2}$ " steel. Stocked in 9", 10 $\frac{1}{2}$ ", 11" and 12" sizes. Slotted hole directly above track for bolting to beam, and three $\frac{3}{8}$ " holes for mounting track. Also available for flat and round bleeding rails. A better hanger at a better price.



San Francisco 24, California

Annual Safety Meeting to Feature Talks on Back Injuries, Photography

THE 1960 safety program prepared by the meat packing section, National Safety Council, focuses on some of the common day-to-day problems encountered by meat industry plants, large and small, and offers practical solutions to these problems. Presented as part of the week-long National Safety Congress,



DR. S. BRODY



D. KOTTARIDIS

the meat packers section will hold its meetings Monday and Tuesday, October 17 and 18, at the Morrison Hotel, Chicago.

If the "Meat Trail" section of THE NATIONAL PROVISIONER is any index, fires are a constant hazard faced by the industry. How to select, use and maintain fire fighting equipment in large or small plants is the topic to be discussed by Marshall Petersen, professional safety engineer and senior safety engineer, National Safety Council, Chicago.

Did a man strain his back muscles while on the job? Is he trying to get a "free ride" or is the sore spot caused by one of the ordinary diseases of life? There are no pat answers to this vexing problem of industrial sore backs but it can be viewed and handled with more objectivity and intelligence when the personnel and safety man, the worker and the industrial commissions appreciate the true facts about the complex structure of the human back. This topic will be discussed in non-medical terms by Dr. Paul W. Rush, medical director at the Argo (Ill.) manufacturing plant of the Corn Products Co.

Ways in which the safety engineer and plant supervisory personnel can work with the medical department to promote overall plant safety will be discussed by Dr. Sidney Brody, medical director, John Morrell & Co., Ottumwa, Ia. Dr. Brody will describe modern concepts of handling cases pertaining to back injuries.

How a plant personnel and safety man can reduce the occurrence of

back injury claims will be explained by Deno Kottaridis, safety director and assistant personnel manager, Stark, Wetzel & Co., Inc., Indianapolis, Indiana.

Brucellosis strikes a meat packing plant from time to time, or at least industrial compensation claims are paid for this illness. How to prevent its occurrence in a plant and how to isolate causative factors in or outside of a plant will be described by Dr. Tracy Barber, medical director, Geo. A. Hormel & Co., Austin, Minn., and Dr. S. L. Hendrick, state veterinarian for the state of Iowa.

In most plants slips and falls are among the top three accident types. Practical suggestions will be presented by a panel which, under E. D. Peeler, jr., safety director, Genesco, Nashville, will explain how to do the following: "Use Your Head—Stay on Your Feet."

The roles of correct footwear and proper housekeeping in accident prevention will be described by Miller G. Hunter, Lehigh Safety Shoe Co., Emmaus, Pa., and Howard Rebolholz, safety director, The Rath Packing Co., Waterloo, Ia., respectively.

Based on actual meat plant visits, H. H. McGinnis, Portland Cement Association, Chicago, will tell how proper floor construction can contribute to safety, sanitation and



J. S. QUEENER



E. R. WALLACE

also to lower costs in carrying on plant operations.

The economics of meat industry compensation programs, which pay up to about 60 per cent of base salary for non-work injuries, place a premium on off-the-job safety. An authority on the subject, J. S. Queener, manager, safety and fire protection division, E. I. du Pont de Nemours & Co., Wilmington, Del., will tell how his company's off-the-job safety program has helped reduce the on-the-job accident frequency rate by 50 per cent since its inauguration in 1953.

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meat packing plants in safety, employ training and overall management control functions will be described in a panel discussion that will be moderated by Gregory Pietraszek, technical editor, THE NATIONAL PROVISIONER.

A professional engineer and photographer, Earl R. Wallace, senior safety engineer, Kodak Park Works, Eastman Kodak Co., Rochester, N.Y., will show colored slides taken with the cooperation of meat packers and will describe his observation of meat plant operations.

For a number of years Canada Packers, Ltd., Toronto, has used photography in its work training program. The "how" of this technique will be demonstrated by M. J. Kirk, safety director of the firm.

The use of photography in accident investigation will be described by Rebholz and its function as an inspection tool to record compliance with various safety regulations will be explained by R. W. Unwin, assistant to the president, Reliable Packing Co., Chicago.

A highlight of the sectional meeting will be the presentation of awards to winners of the National Safety Council meat packers safety contest. A. J. Dittmer, office manager, Gutmann and Co., Chicago, will present the awards.

Packer, Meat Discussed At California Retailer Confab

The recent opening fall dinner meeting of the Delicatessen Council of Southern California in Los Angeles was marked by a lively and constructive interchange between retailers and distributor-suppliers. Topics discussed included some of concern to the packing industry.

The topic "What Deli Suppliers Expect From Retailers" was a follow-up to "How Can Suppliers Do More For Retailers."

Panelist Gerald Brown of Union Packing Co., declared: "The flow of the packaged product from supplier to retailer is part of the life-line of the industry."

Panelist Louis Vitale, on pre-pricing, stated: "Pre-pricing—with clarity and legibility—is becoming increasingly important to appeal to customers and speed traffic. Improperly pre-priced items, improperly read because of lack of visibility, can cause customer resentment to stores."

"Agreement on uniform, desired colors by stores would help. In some cases, the "deli" department wanted for prices. But in another chain, red has been preempted by the meat department."

BOOK REVIEW

Beef Production and Distribution, published by the University of Oklahoma Press, Norman, Okla. Price \$5.00.

Commenting on the changing patterns of beef marketing in the introduction to this 252-page book, author Herrell DeGraff, Babcock professor of food economics, Cornell University, Ithaca, N. Y., notes that cattlemen are participating in an economy that is becoming more complex. With live animals as their unit of sale, they are not turning out a product in either the form or place that is desired by consumers.

"...Marketing firms far removed from the ranch perform many intermediate services to convert cattle to beef and to make beef attractive and competitive in the consumer market. It is easy for the rancher to be suspicious of another man who handles his product when he is far away, unseen, unknown and little understood. Yet the packer is the rancher's packer—and the retailer is the rancher's retailer. He needs them both and they need him."

A chapter on marketing discusses the roles of the packing and retail industries, as well as the marketing of live cattle, in the mass distribution of beef. The author analyzes the following topics with respect to the packing industry: decentralization, the large packers, overcapacity, earnings and the competitive position of the packer.

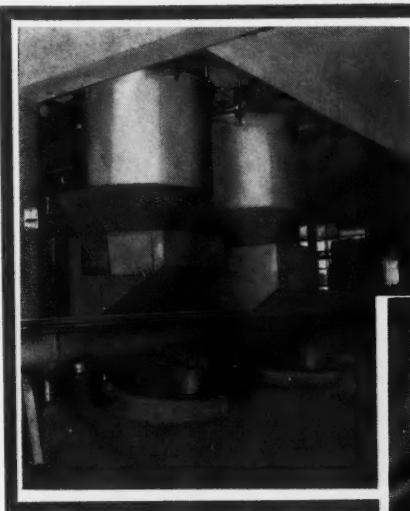
Pointing to a sharpening of the intensity of competition in the packing industry, Dr. DeGraff states that this new competitive structure has placed cattle raisers in a better bargaining position. From the producer's point of view, he says, the main problems that now continue in the packing industry center on relatively lower overall efficiencies of operation than appear to be possible with greater modernization, mechanization and automation of meat packing plants.

This chapter discusses the unique relationship between centralization in retailing and decentralization in meat packing, noting that in the wholesale market the centralized mass retailer needed only to provide a market outlet for the smaller, decentralized packer in order to solidify the competitive position of this type of packer in comparison with the larger, full-line packer. Also featured in this section are several charts containing detailed figures on the retail cutout from carcass beef.

Covered under the heading "Beef

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Cattle in American Agriculture" are the use of agricultural land resources, feed used by beef cattle, regional comparisons and the shifting balance between beef and dairy cattle. A section on the feeding industry discusses packer and retailer feeding, the economic importance of feeding and regional shifts.

How the packer calculates his offering price for live cattle is described in a chapter on price-making and the marketing system. Consumer income, new beef consumers, population shifts and hamburger all are factors serving to affect "The Demand for Beef."

Other chapters are concerned with the cyclical nature of the cattle industry, foreign trade in cattle and beef, price stabilization proposals and "better beef for a bigger market." The latter includes brief explanations of enzyme tenderizing and ultrasonic measurement of muscling in beef animals.

Swift Speakers Present 'Price of Freedom' Talks

In the 1948 Senatorial election Lyndon B. Johnson was sent to the Senate by a majority of 87 votes from the vast state of Texas; in 1951 the mayor of New Haven, Conn., won

his post by a majority of two votes from 70,000 votes cast. These are only two of the many facts assembled in the "Price of Freedom" presentation to underscore the importance of an individual's single vote.

The program, a non-partisan presentation currently being made in the interest of good citizenship by speakers from Swift & Company, is nationwide in its scope. It is the third in a series of presentations to employees in the last 10 years. Through these programs, leads have been secured for similar appearances before local clubs, on television, etc. It has been estimated that the first program, "This is Our Problem," was presented to or seen by more than 2,500,000 persons.

"This program spotlights the urgency of every employee in assuming his responsibility as a good citizen," states H. W. Seinwerth, head of the industrial relations department. "This half-hour presentation, which is being made at Swift units throughout the country, is also available for use by other groups in various communities. The program is entirely non-partisan and non-commercial."

In the presentation it is noted that the apathy with which voters fulfil their responsibility as citizens—only



H. L. SWIFT, industrial relations department, illustrates material used in "Price of Freedom" presentation.

20 per cent of eligible voters have cast their ballots in some local elections—is by far the greatest threat to the American system of free government and to their freedom as individuals. As awesome as is the projected debt on various public programs, which mortgage America's future to the sum of \$750,000,000, this debt is still a minor threat because a politically participating citizenry soon will determine the why, the wherefore and the necessity for such expenditures.

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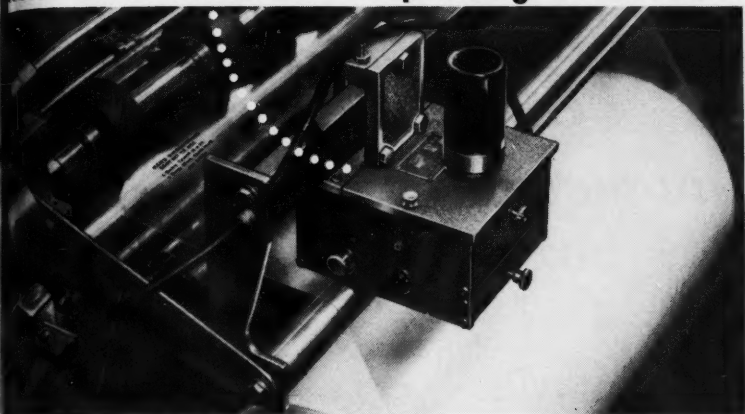
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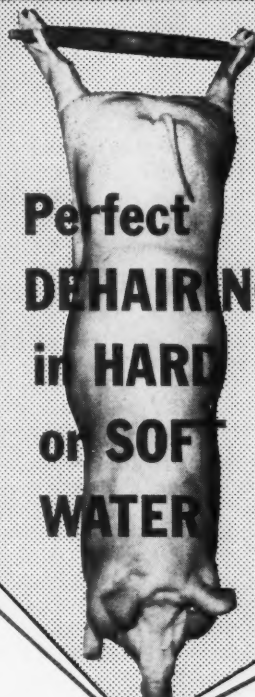
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The Meat Trail...



"MISS PROJECT HOPE," chosen by her fellow employees at Texas Meat Packers, Inc., Dallas, is shown with company president Joseph Spiritas. Texas Meat Packers donated entire shipment of meat to Project Hope, mercy hospital ship carrying medical relief and food supplies to world's underdeveloped areas.

Joe Kaeslin and J. E. Larson Elected to Board of WSMPA

Two new members were elected to the board of directors of the Western States Meat Packers Association at the board's recent meeting in San Francisco. JOE KAESLIN of Alpine Packing Co., Stockton, Cal., was named to finish the unexpired term of W. H. MAFFAT, and J. E. LARSON of Montana Meat Co., Helena, Mont., was chosen to fill the term of CLARK PIERCE.

Directors voted to hold the next board meeting on December 2 at the Sahara Hotel in Las Vegas, Nev. All members of the association are invited to attend the meeting, announced E. FLOYD FORBES, WSMPA president and general manager.

PLANTS

The announced sale of Winslow Bros. & Smith Co., a division of Armour and Company, Chicago, to Shoe Corporation of America, Columbus, O., has been cancelled by agreement, Armour and Company disclosed. Sheepskin tanneries of Winslow Bros. & Smith at Bellingham, Mass., Tilton, N. H., and Gloversville, N. Y., will continue in operation as Armour properties.

Fire damaged between 4,000 and 5,000 lbs. of bacon at the Armour and Company plant in Augusta, Ga. The blaze was confined to the smokehouse and did not endanger other parts of the Chicago firm's plant, ac-

cording to W. R. SHAVE, plant manager. No estimate of the damage has been made.

American Provision Co., Chicago, recently opened its new distributing center in Staunton, Ill. The new business, located in the former Staunton Ice and Fuel Co. building, handles smoked hams, bacon, sausage and luncheon meats. Meat is shipped to Staunton from Chicago.

JOBS

The Meat Inspection Division, U. S. Department of Agriculture, has announced the transfer and promotion of Dr. EARL K. SPRATT to the position of assistant inspector in charge of the South St. Joseph, Mo., meat inspection station. Dr. Spratt formerly



DR. SPRATT

held a supervisory position at the Evansville, Ind., station. He joined the MID in 1936 at the Omaha, Neb., station and was made assistant supervisor before his transfer to Evansville. A native of Fairfield, Ia., Dr. Spratt received the degree of doctor of veterinary medicine from Iowa State College in 1936.

The transfer of CURT Y. HOPKINS from the Sioux Falls, S. D. plant of John Morrell & Co. to the Mor-

rell plant in Ottumwa, Ia., was announced by V. M. KLEESPIES, Ottumwa plant manager. Hopkins will participate in an extensive training program, both in the plant and general office. Starting with Morrell in 1956 in the personnel department of the Sioux Falls plant, Hopkins has been responsible for the employee contact program as well as coordinator of the suggestion system at the plant. He received a law degree and a bachelor of science degree in business administration from the University of South Dakota.

JAMES O. OSTRANDER has been appointed manager of the Swift & Company meat packing plant at Hallstead, Pa. He succeeds ALFRED G. MEYERS, who will go to the veal department at the Chicago general office. Ostrander is a native of St. Louis, Mo., and attended Washington University in that city. He started his career with Swift in St. Louis in 1937 and subsequently served as assistant head calf buyer there and as head calf buyer in Milwaukee. Prior to his Hallstead appointment, Ostrander has been employed in the veal department at Swift's Chicago headquarters.



J. OSTRANDER

DEATHS

GREEN WILSON HICKS, 72, retired partner and manager of Kennett-Murray & Co., livestock buying organization in Nashville, Tenn., died recently. Hicks, who had been retired for the past several years, is survived by a son and a daughter.

ELLSWORTH (DUKE) REICHENBACK, 57, Chicago salesman for Berth. Levi & Co., Inc., casing manufacturer, passed away recently. Reichenback has been with the casing firm for more than 30 years.

ARCH E. DONELSON, 59, president and one of the founders of Donelson Packing Co., Inc., Carey, O., died. He had been in semi-retirement from the packing firm for the past several years. Surviving are his widow, PEARL, and five children.

DR. BROOKS A. BRICE, 56, a physicist with the U. S. Department of Agriculture for the past 30 years, died recently. Dr. Brice headed the

USDA's animal fat properties laboratory in the Eastern Utilization Research and Development Division. Surviving are his widow, MIGNON, and two daughters.

H. RAY KLOMANN, 55, assistant supervisor of sales accounting for Oscar Mayer & Co., Madison, Wis., passed away recently.

TRAILMARKS

PETER W. HOAD, division superintendent at Canada Packers, Ltd., Toronto, was a member of the development team that designed the new Can-Pak kosher restraining pen. His name was omitted inadvertently from the story on this invention that appeared in the NP issue of September 10, 1960.

JACK WEILLER, president of Jack Weiller & Co., Chicago, has been selected by the Western States Meat Packers Association and the National Hide Association to represent the two groups in Japan in discussing with the All-Japan Leather Association the promotion of the domestic consumption of leather in that country. Weiller, a member of the executive committee of the NHA, will leave for Japan on October 7. He will be accompanied by MELVILLE A. DRISKO, director of the Livestock and Meat Products Division, Foreign Agricultural Service, U. S. Department of Agriculture. Aim of the program is to increase the use of both leather and leather products in Japan.

CARL RITTBERGER, president of Carl Rittberger, Sr., Inc., Zanesville, O., is observing his 50th anniversary in

the meat packing business. Rittberger began his career in 1910 with a retail stand in the city market and now owns a 375-acre farm which accommodates processing buildings and a stockyard. Rittberger is assisted in the management of the firm by his sons, HARRY and GEORGE, and by his son-in-law and daughter, ROY BUTLER, JR., and MRS. BUTLER.

ALFRED B. LAVIN, production manager at The Sugardale Provision Co.'s Harmont plant in Canton, O., entered the Harvard University advanced management program which began September 12. Lavin is the third Sugardale executive to attend the 13-week course. The



A. B. LAVIN

series is in its 38th session on the Cambridge, Mass., campus. The program is designed to familiarize corporation leaders with new principles and techniques in the fields of their primary responsibilities and to summarize developments in other areas of management.

At a special meeting attended by Oscar Mayer & Co. executives and members of the board of directors, CARL G. MAYER, vice president of advertising and public relations, was presented a 35-year service pin and ARTHUR E. ERICSON, vice president and treasurer, received a 20-year pin. The presentations were made by OSCAR G. MAYER, JR., president of the firm. Carl G. Mayer,

a nephew of the firm's founder, OSCAR F. MAYER, has been with the company since 1925, when he started in the production department of the Chicago plant. He was made vice president and sales manager in 1933. Mayer was placed in charge of the advertising division in 1935 and the public relations program in 1946. He has been a director of the firm since 1929. Arthur Ericson joined the Madison firm in 1940 as an auditor in the Chicago office. He became company controller in 1945 and transferred to the Madison office. In 1953 he was elected treasurer and in 1955 was named a vice president and director of the firm.

A charter of incorporation authorizing \$100,000 capitalization has been granted to Ottawa Packing Co., Tulsa, Okla. R. L. HASNAGEN and L. J. LIBBERT of Tulsa and A. Z. WATERS of Beggs, Okla., are incorporators.

JOHN S. BARTLEY, architect for The Rath Packing Co., Waterloo, Ia., has been named a member of the citizens advisory committee in Waterloo to assist the Black Hawk County board of supervisors with the planning of a new county courthouse. JAMES EATON of Cedar Falls, Ia., assistant purchasing agent for the Waterloo meat packing firm, has been elected to a three-year term on the Cedar Falls school board.

WALTER O. DECKER, president of The Val Decker Packing Co., Piqua, O., announced the signing of R. C. Bulp Advertising Agency to handle all advertising, public relations and sales promotion for the Piqua plant. R. C. BULP formerly was a sales executive for the Crosley Broadcasting Corp. in Dayton. The Piqua plant, which is currently undergoing expansion, was founded by VAL DECKER in 1873.

Geo. A. Hormel & Co., Austin, Minn., has joined with General Mills in a promotion of Betty Crocker buttermilk pancake mix and Hormel bacon on the West Coast. The promotion will be advertised in magazines, newspapers and on radio.

ELLARD L. PFAELZER, JR., of Pfaelzer Brothers, Chicago meat purveyor, is one of 16 civilians who have been wearing the Army uniform for two weeks at the Military Subsistence Supply Agency, Chicago. All are Army reservists who were fulfilling mobilization training requirements. They studied the operations of the Defense Department's worldwide food-supply organization and heard of the national headquarters activities from Maj. Gen. HUGH MACKINTOSH, chief of MSSA. Col



OLDEST retired employees and employees with longest service who attended first reunion for retired employees of Burns & Co., Ltd., Calgary, Alta., are (l. to r.): Walter Lewis, 81 years of age; John Tighe, 83; Bill Cunningham, 48-year veteran of Burns; Bill McKay, 81 years of age, and Dave Murphy, 46-year veteran. Reunion, which was attended by more than 50 retired employees representing 2,132 years of service, was held in honor of firm members who have retired from the Canadian meat packing organization since 1945.

ounder, with the started t of the de vice in 1933, of the and the n 1946. he firm ined the auditor became 45 and office. reasurer e presi- n. author- has been Co., Tul- and L. J. WATERS orators. tect for rloo, Ia, of the in Wa- k Hawk with the urthouse, Ia, as- the Wa- has been on the ident of , Piqua, of R. C. o handle ions and ua plant. a sales Broad- he Piqua dergoing by VAL Austin, ral Mills Crocker I Hormel The pro- n maga- dio. of Pfael- eat pur- ans who rmy uni- Military y, Chica- ists who training d the op- artment's nization. eadquar- en. Hova SA. Col.

JAMES S. STEWART, commanding officer of the Chicago regional office, explained how his and nine similar regional offices supply food to military installations in this country and overseas. Field trips scheduled for the reservists included visits to the Quartermaster Food and Container Institute, Army Subsistence Testing Laboratory, South Water Street Market, Union Stock Yards, Board of Trade and various food manufacturers and processors in the Chicago area.

MID Moisture Review

[Continued from page 57]

early this week, according to executive secretary John A. Killick, who noted: "To this moment, there has not been one single dissenting opinion expressed in opposition to the proposal (of the NIMPA executive committee) that the smoked meat requirement should be removed entirely from MID regulations, and not just modified or revised."

The trade associations urged members to submit their individual views to the MID before the November 19 deadline for written comments. AMI president Davison said the Institute will submit a brief pursuant to the resolution of the board. Davison added: "Following are some of the points which members might want to consider in formulating their statements:

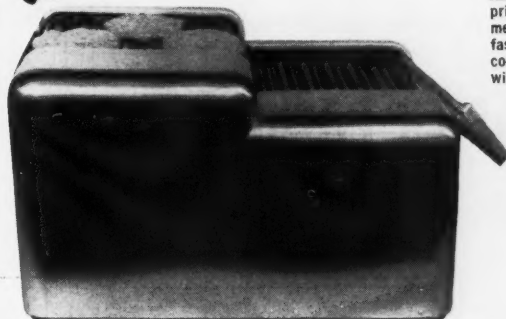
"1. The present MID regulation is based on the assumption that consumers expect smoked hams to weigh 100 per cent of green weight. Actually, it is doubtful that consumers have any expectancy whatever on this point.

"2. Experience has shown that MID cannot enforce this regulation and from the standpoint of maintaining the integrity of the inspection program it is undesirable to continue any control which is not or cannot be enforced uniformly throughout the industry.

"3. There are indications that present-day preference of consumers is for a more moist product than is allowed by this regulation. (The Institute currently has in process a consumer research study to provide additional factual information on this subject.)

"4. The industry is keenly aware of the need to maintain the acceptability of pork generally, and it is entitled to improve its products without being hampered by a regulation which prevents the recognition of changing public preference—a regulation which has nothing to do with wholesomeness."

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ALL MEAT . . . output, exports, imports, stocks

Meat Production Settles To More Normal Level

Meat production settled to a more normal level last week after the sharp increase of the first post-Labor Day week. Volume of production for the period at 432,000,000 lbs. was down from 445,000,000 lbs. in the previous week. Also, due to a relatively large reduction in pork production, current volume of meat was also well below the 444,000,000 lbs. produced in the same week last year. Cattle kill, while down somewhat from the number a week earlier, was well above the count last year. However, this year's edge in cattle slaughter was not enough to offset the smaller kill of hogs. Estimated slaughter and meat production by classes appear below as follows:

Week Ended	BEEF		PORK (Excl. lard)	
	Number M's	Production Mil. lbs.	Number M's	Production Mil. lbs.
Sept. 24, 1960	405	234.1	1,255	171.1
Sept. 17, 1960	420	245.0	1,250	170.4
Sept. 26, 1959	373	221.7	1,466	196.6

Week Ended	VEAL		LAMB AND MUTTON		TOTAL MEAT PROD. Mil. lbs.
	Number M's	Production Mil. lbs.	Number M's	Production Mil. lbs.	
Sept. 24, 1960	115	13.6	295	13.6	432
Sept. 17, 1960	115	14.3	325	14.9	445
Sept. 26, 1959	103	12.3	306	13.9	444

1960-60 HIGH WEEK'S KILL: Cattle, 462,118; Hogs, 1,859,215; Calves, 200,555; Sheep and Lambs, 369,561.
 1959-60 LOW WEEK'S KILL: Cattle, 154,814; Hogs, 641,000; Calves, 55,241; Sheep and Lambs, 137,677.

AVERAGE WEIGHT AND YIELD (LBS.)				
Week Ended	CATTLE		HOGS	
	Live	Dressed	Live	Dressed
Sept. 24, 1960	1,005	578	237	136
Sept. 17, 1960	1,015	584	237	136
Sept. 26, 1959	1,030	594	232	134

Week Ended	CALVES		SHEEP AND LAMBS		LARD PROD. Per cwt.	Mil. lbs.
	Live	Dressed	Live	Dressed		
Sept. 24, 1960	205	118	95	46	—	42.4
Sept. 17, 1960	215	124	95	46	—	32.2
Sept. 26, 1959	205	119	95	46	13.4	45.6

Industry-Wide Beef Grading Conference To Be Nov. 14-15

November 14-15 have been selected as the dates for the special industry-wide conference on beef grading in Kansas City, it has been announced. Dean Brown, chairman of the conference, said that nearly 300 cattle and beef industry leaders are being invited to participate. Speakers will represent all phases of the "beef team" from the rancher to the consumer.

Brown, who heads the special beef grading study committee of the American National Cattleman's Association, said the meeting will explore the overall history and current aspects of beef grading. Various segments of the industry will be asked to present their views.

To Advertise Or Not Is 'Meaty' British Question

The British meat trade is pondering the question of whether it is feasible to launch an advertising program on a nation-wide scale to promote meat sales. To get the idea out of the talking stage and "off the

ground," the Wessex and Isle of Wight (Meat) Council is sending out questionnaires to members on order to obtain a fair appraisal of the thinking in regard to the subject.

The major "sticker" to the question is to what extent members are willing to go in support of the proposal with "hard" cash. A donation by butchers of 10s maximum was suggested for a trial advertisement in the *Sunday Graphic* to test "how many butchers would spend something on a legitimate business expense of advertising meat."

EAST COAST MEAT IMPORTS

Arrival of foreign meat at New York, Boston and Philadelphia, as reported in pounds by the U. S. Department of Agriculture:

WEEKS ENDED AUG. 30.
 SEPT. 6, 13 AND 20, 1960
 From Argentina—304,025 cured beef. Australia—5,476,102 boneless beef, 194,776 boneless lamb and 590,524 boneless mutton. Brazil—388,249 cured beef. Canada—179,232 carcass beef and veal, 124,503 miscellaneous pork. Costa Rica—592,590 boneless beef. Denmark—703,415 cured pork. Germany—14,649 cured pork. Holland—475,014 cured pork. Ireland—2,753,313 boneless beef. Mexico—58,135 boneless beef. New Zealand—4,826,407 boneless beef, 134,355 boneless veal and 61,148 boneless lamb cuts. Paraguay—144,454 cured beef. Poland—86,181 cured pork. Uruguay—175,500 cured beef.

U. S. MEAT EXPORTS

While aggregate volume of red meat exported from the United States normally is small compared with imports, the outward movement of some meat products constitutes a fairly impressive total. U.S. exports of livers in July, while down from 4,319,095 lbs. in the same month last year, amounted to 3,349,823 lbs. Exports of beef tongues and variety meats, while smaller than those of livers, were up moderately from July, 1959, volume.

U.S. exports of animal fats is always of impressive size. Lard exports in July at 42,939,534 lbs., however, were down from 58,365,060 lbs. last year. Outshipments of inedible tallow totaled 131,255,299 lbs. in July for a sharp increase over July, 1959 exports of 114,510,321 lbs.

U.S. exports of meat and meat products in July, 1960-59, are listed below as follows:

EXPORTS (Domestic):		
Beef and veal—		
Fresh or frozen (except canned) ..	718,785	716,933
Pickled or cured (except canned) ..	895,174	1,232,245
Pork—		
Fresh or frozen (except canned) ..	1,155,700	1,397,875
Hams and shoulders, cured or cooked ..	228,578	1,538,770
Bacon ..	354,574	1,527,251
Pork, pickled, salted or otherwise cured ..	863,683	950,422
Sausage, bologna & frankfurters (except canned) ..	200,308	169,901
Meat and meat products (except canned) ..	30,843	25,283
Beef and pork livers, fresh or frozen ..	3,349,823	4,319,095
Beef tongues, fresh or frozen ..	2,671,491	1,700,074
Variety meats (except canned) ..	2,122,092	1,467,359
Meat specialties, frozen ..	579,946	262,714
Canned meats—		
Beef and veal ..	156,020	174,707
Sausage, bologna & frankfurters ..	70,449	86,321
Hams and shoulders ..	34,445	60,909
Pork, canned ..	369,217	312,859
Meat and meat products ..	126,099	393,390
Lamb and mutton (except canned) ..	84,540	97,456
Lard (includes rendered pork fat) ..	42,939,534	58,365,060
Shortenings, animal fat (excl. lard) ..	131,040	155,225
Tallow, edible ..	488,972	504,614
Tallow, inedible ..	131,255,299	114,510,321
Inedible animal oils ..	352,745	176,323
Inedible animal greases and fats ..	16,508,247	8,594,515

Check Higher Meat Trend

The meat price trend switched suddenly in the week ended September 20 as the average wholesale price index settled back to 96.1 after rising sharply to 96.4 the previous week. Meanwhile, the general commodity price index held steady at 119.4. The same indexes for the corresponding week last year were 99.8 and 119.6 per cent, respectively.

PROCESSED MEATS . . . SUPPLIES

Lamb Council, Leslie Salt To Slate Western 'Lamb-O-Rama'

In a joint effort, the American Lamb Council and the Leslie Salt Company will sponsor a "Lamb-O-Rama" in the western states during October and into November. Hundreds of retail stores will be contacted to participate in the month-long promotion to spur lamb sales.

Leslie Salt representatives, numbering 70, will set up lamb displays, including colorful posters in thousands of retail stores throughout the western states. The lamb promotion will be similar to the California "Beef-O-Rama" promotion sponsored by the Leslie Salt Company and the California Beef Council.

Industry Being Revolutionized, Iowa Beefman Are Informed

E. J. Schmeuker, president of the Iowa Beef Improvement Association, told a meeting of the Iowa Beef Producers Conference in Ames, Ia., that the beef cattle industry is being revolutionized, and it is the responsibility of purebred cattle breeders to move with it.

Schmeuker added that breeders must work to develop the western market that already exists by developing cattle which have some records other than a registration certificate. He suggested that breeders think of beef production testing as

a means of comparing production abilities of cows and bulls within a herd, rather than thinking of it as a competitive event.

A second misconception among beef breeders, Schmeuker said, is that production testing will result in bigger animals. He said the size of the animal after it is three to five years old is of minor concern if it will produce an early-maturing calf.

Schmeuker said the commercial producer is interested in type, conformation, and quality, as well as size and gain ability.

No 'Stamp' Of Approval Here

British butchers, loyal to agreed closing hours regulations, are about ready to "rear up" over the growing practice among some smaller meat shops of remaining open until late hours, even up to 10 p.m. on Saturdays, are becoming even more furious over another later development among the "wild cat" shops. Now, even postal sub-stations are getting into the act by making meat available on their premises.

PET FOOD PRODUCTION

Canned food and canned for fresh frozen food component for dogs, cats and like animals, prepared under federal inspection and certification for the week ended September 10 totaled 5,474,602 lbs.

USDA Ground Beef Buy Last Week 3,927,000 Lbs.; No Lamb

The U.S. Department of Agriculture late last week reported the purchase of an additional 3,927,000 lbs. of ground beef in its continuing program to help support the cattle market and to furnish meat for school lunches. About \$7,737,000 of Section 32 funds have been expended for the 19,152,000 lbs. of ground beef purchased through last week under the program.

Prices paid for the ground meat ranged from 40.42¢ to 40.50¢ per lb. Offers were accepted from 19 of 27 bidders who offered a total of 6,111,000 lbs. of the meat. This latest buy of beef will be due for delivery in the period October 17 through 29.

No frozen lamb was purchased due to the unacceptable level of asking prices, making it the fourth straight week that the USDA has rejected offers to sell frozen lamb.

MEAT PRODUCTS GRADED

Meat and meat products graded or accepted as complying with specifications of the U. S. Department of Agriculture (in 000 lbs.):

	July 1960	July 1959
Beef	584,032	602,890
Veal and calf	16,015	18,321
Lamb and mutton	23,005	19,651
Totals	623,052	641,722
Bull, stag	1,033	1,000
Other meats, lard	12,116	12,070
Grand totals	636,201	654,893

DOMESTIC SAUSAGE

Pork sausage, bulk (crl., lb.)	
In 1-lb. roll	38 @ 43
Pork saus; sheep cas.	
In 1-lb. package	54 @ 58
Franks, sheep casing	
In 1-lb. package	64 @ 70
Franks, skinless	50 @ 52
Bologna, ring, bulk	49 @ 54
Bologna, a.c., bulk	39 1/2 @ 42
Smoked liver, a.c., bulk	37 @ 46
Polish sausage, self-service pack.	55 @ 72
Smoked liver, n.c., bulk	51 @ 53
New Eng. lunch spec.	63 @ 69
Olive loaf, bulk	46 1/2 @ 53
Blood and tongue, n.c.	46 1/2 @ 69
Blood, tongue, a.c.	45 1/2 @ 65
Pepper loaf, bulk	49 1/2 @ 66 1/2
Pickle & Pimento loaf	43 1/2 @ 53
Bologna, a.c., sliced	
6, 7-oz. pack. doz.	2.65 @ 3.00
New Eng. lunch spec., sliced, 6, 7-oz., doz.	4.05 @ 4.92
Olive loaf, sliced, 6, 7-oz., doz.	3.00 @ 3.84
P.L. sliced, 6-oz. doz.	2.85 @ 4.80
P&P loaf, sliced, 6, 7-oz., dozen	2.85 @ 3.60

DRY SAUSAGE

(Sliced, 6-oz. package, lb.)	
Cervelat, hog bungs	1.05 @ 1.07
Thuringer	64 @ 66
Farmer	89 @ 91
Holsteiner	87 @ 89
Salami, B.C.	1.01 @ 1.03
Salami, Genoa style	1.12 @ 1.14
Salami, cooked	.55 @ 57
Pepperoni	.91 @ 93
Sicilian	1.01 @ 1.03
Goteborg	.91 @ 93
Mortadella	.62 @ 64

CHGO. WHOLESALE SMOKED MEATS

Wednesday, Sept. 28, 1960

Hams, to-be-cooked, (av.)	
14/16, wrapped	46
Hams, fully cooked,	
14/16, wrapped	47
Hams, to-be-cooked,	
16/18, wrapped	45
Hams, fully cooked,	
16/18, wrapped	46
Bacon, fancy, de-rind,	
8/10 lbs., wrapped	42
Bacon, fancy sq. cut, seed-less, 10/12 lbs., wrapped	39
Bacon, No. 1, sliced 1-lb. heat seal, self-service pkg.	53

SPICES

(Basis Chicago, original barrels, bags, bales)

	Whole Ground
Allspice, prime	86
resifted	99
Chili pepper	56
Chili powder	56
Cloves, Zanzibar	60
Ginger, Jamaica	46
Mace, fancy Banda	3.50
East Indies	2.95
Mustard flour, fancy	43
No. 1	38
West Indies nutmeg	1.82
Paprika, American,	
No. 1	52
Paprika, Spanish,	
No. 1	67
Cayenne pepper	63
Pepper:	
Black, No. 1	56
Red	69
White	89

SAUSAGE CASINGS

(Lcl prices quoted to manufacturers of sausage)

Beef rounds: (Per set)	
Clear, 29/35 mm.	1.35 @ 1.40
Clear, 35/38 mm.	1.35 @ 1.50
Clear, 35/40 mm.	1.15 @ 1.40
Clear, 38/40 mm.	1.30 @ 1.40
Not clear, 40 mm./up	90 @ 95
Not clear, 40 mm./dn	80 @ 85
Beef weasands: (Each)	
No. 1, 24 in./up	15 @ 18
No. 1, 22 in./up	16 @ 18
Beef middles: (Per set)	
Ex. wide, 2 1/2 in./up	3.75 @ 3.85
Spec. wide, 2 1/2 in.	2.75 @ 2.90
Spec. med. 1 1/2-2 1/2 in.	1.85 @ 1.95
Narrow, 1 1/4 in./dn.	1.15 @ 1.20
Beef bung caps: (Each)	
Clear, 5 in./up	42 @ 46
Clear, 4 1/2-5 inch	32 @ 36
Clear, 4-4 1/2 inch	21 @ 23
Clear, 3 1/2-4 inch	17 @ 19
Beef bladders, salted: (Each)	
7 1/2 inch/up, inflated	22
6 1/2-7 1/2 inch, inflated	14
5 1/2-6 1/2 inch, inflated	14
Pork casings: (Per hank)	
29 mm./down	4.75 @ 5.00
29/32 mm.	4.75 @ 5.00
32/35 mm.	3.25 @ 3.60
35/38 mm.	2.50 @ 3.00
38/42 mm.	2.35 @ 2.50
Hog bungs: (Each)	
Sow, 34 inch cut	62 @ 64
Export, 34 in. cut	55 @ 57
Large prime, 34 in.	42 @ 44
Med. prime, 34 in.	29 @ 31
Small prime, 34 in.	16 @ 19
Middles, cap off	72 @ 74
Skip bungs	11 @ 12

Sheep casings: (Per hank)	
26/28 mm.	5.35 @ 5.40
24/26 mm.	5.25 @ 5.35
22/24 mm.	4.15 @ 4.25
20/22 mm.	3.65 @ 3.75
18/20 mm.	2.70 @ 2.80
16/18 mm.	1.35 @ 1.45

CURING MATERIALS

Nitrite of soda, in 400-lb (Cwt.)	
bbils, del. or f.o.b. Chgo.	\$11.50
Pure refined gran. nitrate of soda, f.o.b. N.Y.	5.90
Pure refined powdered nitrate of soda, f.o.b. N.Y.	10.90
Salt, paper-sacked, f.o.b. Chgo. gran. carlots, ton	30.50
Rock salt in 100-lb. bags, f.o.b. whse., Chgo.	28.50
Sugar:	
f.o.b., spot, N.Y.	6.50
Refined standard cane gran., del'd. Chgo.	6.60
Packers curing sugar, 100-lb. bags, f.o.b. Reserve, La., less 2%	8.80
Dextrose, regular:	
Cerelose, (carlots, cwt.)	7.70
Ex-warehouse, Chicago	7.50

SEEDS AND HERBS

(Lcl., lb.)	Whole Ground
Caraway seed	33
Cominos seed	40
Mustard seed	
fancy	25
yellow Amer.	25
Oregano	37
Coriander,	
Morocco, No. 1	24
Marjoram, French	54
Sage, Dalmatian,	
No. 1	59

FRESH MEATS... Chicago and outside

CHICAGO
Sept. 27, 1960

CARCASS BEEF

Steers, gen. range:	(carlots, lb.)
Choice, 500/600	39½
Choice, 600/700	39½
Choice, 700/800	39
Good, 500/600	37
Good, 600/700	36½
Bull	32½
Commercial cow	30½
Canner-cutter cow	28

PRIMAL BEEF CUTS

Prime:	
Rounds, all wts.	52 @ 53
Tr. loins, 50/70 (cl)	80 @ 95
Sq. chux, 70/90	33½ @ 34
Armchux, 80/110	31½ @ 32
Ribs, 25/35 (cl)	55 @ 57
Briskets (cl)	26
Naveis, No. 1	15½ @ 16
Flanks, rough No. 1	17
Choice:	
Hindqtrs., 5/700	50
Foreqtrs., 5/800	31
Rounds, 70/90 lbs.	47½ @ 50
Tr. loins, 50/70 (cl)	69 @ 74
Sq. chux, 70/90	33½ @ 34
Armchux, 80/110	31½ @ 32
Ribs, 25/30 (cl)	50 @ 53
Ribs, 30/35 (cl)	50 @ 52
Briskets, (cl)	26
Naveis, No. 1	15½ @ 16
Flanks, rough No. 1	17
Good (all wts.):	
Sq. chucks	33 @ 34
Rounds	47 @ 48
Briskets	25 @ 26
Ribs	47½ @ 48½
Loins, trim'd.	67½ @ 68½

COW, BULL TENDERLOINS

C&C grade, fresh (Job lots, lb.)	
Cow, 3 lbs./down	70 @ 75
Cow, 3/4 lbs.	75 @ 82
Cow, 4/5 lbs.	85 @ 92
Cow, 5 lbs./up	105 @ 110
Bull, 5 lbs./up	105 @ 110

CARCASS LAMB

	(cl., lb.)
Prime, 35/45 lbs.	42 @ 44
Prime, 45/55 lbs.	42 @ 44
Prime, 55/65 lbs.	42 @ 43
Choice, 35/45 lbs.	42 @ 44
Choice, 45/55 lbs.	42 @ 44
Choice, 55/65 lbs.	41 @ 43
Good, all wts.	38 @ 42

PACIFIC COAST WHOLESALE MEAT PRICES

	Los Angeles Sept. 27	San Francisco Sept. 27	No. Portland Sept. 27
FRESH BEEF (Carcass):			
STEER:			
Choice, 5-600 lbs.	\$39.50 @ 42.00	\$42.00 @ 43.00	\$42.50 @ 44.00
Choice, 6-700 lbs.	39.00 @ 41.00	39.50 @ 42.00	41.00 @ 43.50
Good, 5-600 lbs.	37.00 @ 39.00	38.00 @ 40.00	41.50 @ 43.00
Good, 6-700 lbs.	35.00 @ 38.00	37.00 @ 38.00	40.50 @ 42.50
Stand., 3-600 lbs.	34.00 @ 37.00	38.00 @ 39.00	36.00 @ 39.00
COW:			
Commercial, all wts.	30.00 @ 33.00	30.00 @ 33.00	33.00 @ 35.00
Utility, all wts.	28.50 @ 32.00	27.00 @ 30.00	31.00 @ 33.00
Canner-cutter	26.00 @ 29.00	25.00 @ 27.00	29.00 @ 31.00
Bull, util. & com'l.	36.00 @ 40.00	36.00 @ 38.00	39.00 @ 40.00
FRESH CALF:			
(Skin-off)		(Skin-off)	(Skin-off)
Choice, 200 lbs./down	47.00 @ 51.00	None quoted	42.00 @ 46.00
Good, 200 lbs./down	44.00 @ 48.00	40.00 @ 44.00	39.00 @ 44.00
LAMB (Carcass):			
Prime, 45-55 lbs.	39.00 @ 42.00	38.00 @ 42.00	36.00 @ 39.00
Prime, 55-65 lbs.	38.00 @ 41.00	37.00 @ 40.00	None quoted
Choice, 45-55 lbs.	39.00 @ 42.00	38.00 @ 42.00	36.00 @ 39.00
Choice, 55-65 lbs.	38.00 @ 41.00	37.00 @ 40.00	None quoted
Good, all wts.	36.00 @ 41.00	35.00 @ 38.00	35.00 @ 37.00
FRESH PORK: (Carcass) (Packer style)		(Shipper style)	(Shipper style)
135-175 lbs. U. S. No. 1-3	None quoted	None quoted	27.00 @ 29.00
LOINS:			
8-10 lbs.	49.00 @ 52.00	53.00 @ 56.00	52.00 @ 56.00
10-12 lbs.	48.00 @ 52.00	52.00 @ 56.00	52.00 @ 56.00
12-16 lbs.	48.00 @ 52.00	48.00 @ 54.00	52.00 @ 56.00
PICNICS:			
12-16 lbs.	(Smoked) 41.00 @ 48.00	(Smoked) 45.00 @ 50.00	(Smoked) 48.00 @ 52.00
HAMS (Cured):			
12-16 lbs.	41.00 @ 48.00	45.00 @ 50.00	48.00 @ 52.00
16-20 lbs.	40.00 @ 50.00	44.00 @ 48.00	47.00 @ 50.00

NEW YORK
Sept. 28, 1960

CARCASS BEEF AND CUTS

Prime steer:	(cl., lb.)
Hinds., 6/700	53 @ 59
Hinds., 7/800	53 @ 58
Rounds, cut across,	
flank off	50 @ 57
Rds., dia. bone, f.o.	51 @ 57
Short loins, untrim.	74 @ 90
Short loins, trim.	102 @ 135
Flanks	17 @ 20
Ribs	54 @ 60
Arm chucks	34½ @ 38
Briskets	26 @ 33
Plates	15½ @ 18
Choice steer:	
Carcass, 6/700	41½ @ 42½
Carcass, 7/800	41 @ 42½
Carcass, 8/900	40½ @ 41½
Hinds., 6/700	50½ @ 56
Hinds., 7/800	49 @ 55
Rounds, cut across,	
flank off	49 @ 57
Rds., dia. bone, f.o.	50 @ 56
Short loins, untrim.	57 @ 67
Short loins, trim.	81 @ 102
Flanks	17 @ 20
Ribs	50 @ 56
Arm chucks	34 @ 37
Briskets	25 @ 33
Plates	15 @ 18
Good steer:	
Carcass, 5/600	39½ @ 41½
Carcass, 6/700	39½ @ 41½
Carcass, 7/800	49 @ 55
Hinds., 6/700	49 @ 55
Hinds., 7/800	49 @ 55
Rounds, cut across,	
flank off	48 @ 55
Rds., dia. bone, f.o.	49 @ 55
Short loins, untrim.	55 @ 60
Short loins, trim.	73 @ 80
Ribs	48 @ 54
Flanks	17 @ 20
Arm chucks	33½ @ 37

FANCY MEATS

(cl., lb.)	
Veal breads, 6/12-oz.	127
12-oz./up	147
Beef livers, selected	36
Beef kidneys	27
Oxtails, ¾-lb., frozen	20

VEAL SKIN-OFF

(Carcass prices, cl., lb.)	
Prime, 90/120	52 @ 56
Prime, 120/150	51 @ 55
Choice, 90/120	46 @ 52
Choice, 120/150	45 @ 51
Good, 60/90	39 @ 42
Good, 90/120	40 @ 44
Good, 120/150	39 @ 43
Choice calf, all wts.	36 @ 41
Good calf, all wts.	35 @ 39

CARCASS LAMB

(cl., lb.)	
Prime, 35/45	43 @ 45
Prime, 45/55	42 @ 45
Prime, 55/65	42 @ 45
Choice, 35/45	42 @ 45
Choice, 45/55	41½ @ 44
Choice, 55/65	41 @ 42
Good, 35/45	40 @ 42
Good, 45/55	39 @ 42
Good, 55/65	38 @ 41

CARCASS BEEF

(Carcass prices, cl., lb.)	
Steer, choice, 6/700	40½ @ 41½
Steer, choice, 7/800	38½ @ 41½
Steer, choice, 8/900	38 @ 41
Steer, good, 6/700	38½ @ 40½
Steer, good, 7/800	37½ @ 39½
Steer, good, 8/900	37 @ 39

PHILA. FRESH MEATS

Sept. 27, 1960

PRIME STEER:	(cl., lb.)
Carcass, 5/700	43 @ 44½
Carcass, 7/900	42 @ 44
Rounds, flank off	52 @ 56
Loins, full, untr.	55 @ 60
Loins, full, trim.	none qtd.
Ribs, 7-bone	55 @ 62
Armchux, 5-bone	35 @ 38
Briskets, 5-bone	28 @ 33
CHOICE STEER:	
Carcass, 5/700	42 @ 43½
Carcass, 7/900	41 @ 43
Rounds, flank off	50 @ 54
Loins, full, untr.	50 @ 54
Loins, full, trim.	69 @ 72
Ribs, 7-bone	51 @ 54
Armchux, 5-bone	34 @ 38
Briskets, 5-bone	28 @ 33
GOOD STEER:	
Carcass, 5/700	40 @ 42
Carcass, 7/900	39½ @ 41½
Rounds, flank off	48 @ 52
Loins, full, untr.	48 @ 50
Loins, full, trim.	68 @ 66
Ribs, 7-bone	48 @ 51
Armchux, 5-bone	33 @ 36
Briskets, 5-bone	28 @ 32
COW CARCASS:	
Comm'l. 350/700	32 @ 33½
Utility 350/700	31 @ 33
Can-cut 350/700	30 @ 32
VEAL CARC.	
Choice	
90/120 lbs.	51 @ 53
120/150 lbs.	51 @ 53
LAMB CARC.:	
Prime	
35/45 lbs.	43 @ 45
45/55 lbs.	42 @ 44
55/65 lbs.	41 @ 43

Phila., N. Y. Fresh Pork

PHILADELPHIA: (local, cl., lb.)	
Loins, reg., 8/12	51 @ 54
Loins, reg., 12/16	50 @ 52
Boston Butts 4/8	37 @ 40
Spareribs, 3 lb./dn	42 @ 46
Hams, sknd., 10/12	41 @ 43
Hams, sknd., 12/16	39 @ 41
Picnics, S.S. 4/8	25½ @ 27
Picnics, S.S. 6/8	24 @ 26
Bellies, 10/14	28 @ 39

NEW YORK: (cl., lb.)

Loins, reg., 8/12	50 @ 56
Loins, reg., 12/16	49 @ 54
Hams, sknd., 12/16	41 @ 45
Boston Butts, 4/8	36 @ 41
Spareribs, 3/4 down	40 @ 49

CHGO. FRESH PORK AND

PORK PRODUCTS

	Sept. 27, 1960
Hams, skinned, 10/12	40½
Hams, skinned, 12/14	39½
Hams, skinned, 14/16	38
Picnics, 4/6 lbs.	25
Picnics, 6/8 lbs.	23
Pork loins, boneless	55
Shoulders, 16/dn.	30
Pork livers (Job lots, lb.)	16½
Tenderloins, fresh, 10½	70 @ 71
Neck bones, bbls.	11
Feet, s.c., bbls.	7 @ 7½

OMAHA, DENVER MEATS

(Carcass carlots, cwt.)	
Omaha, Sept. 28, 1960	
Choice steer, 6/700	38.75
Choice steer, 7/800	38.25
Choice steer, 8/900	37.00 @ 37.25
Good steer, 6/800	36.50 @ 37.75
Choice heifer, 5/700	37.00 @ 37.25
Good heifer, 5/700	35.00 @ 35.25
Cow, c-c & util.	27.00 @ 27.50
Pork loins, 8/12	47.00 @ 48.00
Boston butts, 4/8	35.00 @ 35.50
Hams, sknd., 12/16	36.50 @ 37.50
Denver, Sept. 28, 1960	
Choice steer, 6/700	38.50
Choice steer, 7/800	38.00 @ 38.50
Choice steer, 8/900	37.00
Good steer, 6/800	34.00 @ 38.00
Cow, utility	27.50 @ 28.50
Cow, can-cut.	26.00 @ 27.00

CHGO. PORK SAUSAGE MATERIALS—FRESH

Pork trimmings: (Job lots)	
40% lean, barrels	21
50% lean, barrels	22½
60% lean, barrels	34
95% lean, barrels	39
Pork head meat	30
Pork cheek meat	
trimmed, barrels	33½
Pork cheek meat, untrimmed	31

PORK AND LARD ... Chicago and outside

CHICAGO PROVISION MARKETS From the National Provisioner Daily Market Service

CASH PRICES

(Carlott basis, Chicago price zone, Sept. 28, 1960)

SKINNED HAMS		BELLIES	
F.F.A. or fresh	Frozen	F.F.A. or fresh	Frozen
39½	10/12	39½	27½
39@39½	12/14	38½	27½
38	14/16	37½	27½
38	16/18	37½	27½
36b	18/20	36	27½
35	20/22	35	27½
34	22/24	34	27½
32½	24/26	32½	27½
32½	25/30	32½	27½
30@30½	25 up, 2s in	30@30½	25
PICNICS		D.S. BRANDED BELLIES (CURED)	
F.F.A. or fresh	Frozen	G.A., fresh, frozen	D.S. clear
24½	4/6	24½	23n
22½	6/8	22½	22½
22½	8/10	22n	19
22½	10/12	22n	19n
20½n	f.f.a. 8/up 2's in	20	14½@16½
22	fresh 8/up 2's in	n.q.	
FRESH PORK CUTS		FAT BACKS	
Job Lot	Car Lot	Frozen or fresh	Cured
49	Loins, 12/dn	48½	7½n
47	Loins, 12/16	47	8n
42@43	Loins, 16/20	41b	10/12
35	Loins, 20/up	34½b	10/12
36½@37	Butts, 4/8	35½	12/14
32½	Butts, 8/12	31½	14/16
32½	Butts, 8/up	31½	16/18
37@37½	Ribs, 3/dn	36½	18/20
26	Ribs, 3/5	25	20/25
22	Ribs, 5/up	21n	22½
a-asked, b-bid, n-nominal		OTHER CELLAR CUTS	
		Frozen or fresh	Cured
		13	Sq. Jowls, boxed
		10½@11	Jowl Butts, loose
		12½	Jowl Butts, boxed

LARD FUTURES PRICES

(Drum contract basis)

FRIDAY, SEPT. 23, 1960

	Open	High	Low	Close
Oct.	9.12	9.12	9.05	9.05b
Nov.	9.15	9.15	9.12	9.12b
Dec.	10.05	10.05	10.02	10.05b
Jan.	10.00	10.00	10.00	10.00
Mar.	...	...	...	10.22a
May	10.27	10.27	10.27	10.27

Sales: 920,000 lbs.

Open interest at close, Thurs., Sept. 22: Oct., 169; Nov., 98; Dec., 163; Jan., 125; Mar., 8 and May, 17 lots.

MONDAY, SEPT. 26, 1960

	Oct.	Nov.	Dec.	Jan.	Mar.	May
Open	9.07	9.10	8.90	9.00	...	...
High	9.10	9.10	9.00	9.10	...	...
Low	9.07	9.07	8.92	9.07	...	...
Close	9.07	9.07	8.92	9.07	...	10.25a

Sales: 1,840,000 lbs.

Open interest at close, Fri., Sept. 23: Oct., 171; Nov., 98; Dec., 168; Jan., 25; Mar., 8 and May, 17 lots.

TUESDAY, SEPT. 27, 1960

	Oct.	Nov.	Dec.	Jan.	Mar.	May
Open	9.02	9.02	8.97	9.02	...	...
High	9.12	9.12	9.12	9.12	...	...
Low	10.02	10.02	10.00	10.02	...	...
Close	9.97	10.02	9.77	10.02a	...	10.15b
	...	...	...	...	...	10.30b

Sales: 1,080,000 lbs.

Open interest at close, Mon., Sept. 26: Oct., 161; Nov., 98; Dec., 170; Jan., 28; Mar., 8 and May, 17 lots.

WEDNESDAY, SEPT. 28, 1960

	Oct.	Nov.	Dec.	Jan.	Mar.	May
Open	9.00	9.00	8.85	8.90	...	...
High	9.12	9.17	9.00	9.07	...	...
Low	10.07	10.07	9.95	10.05	...	...
Close	9.97b	10.15a	9.97b	10.15a	...	10.30a

Sales: 2,160,000 lbs.

Open interest at close, Tues., Sept. 27: Oct., 160; Nov., 98; Dec., 173; Jan., 35; Mar., 8 and May, 17 lots.

THURSDAY, SEPT. 29, 1960

	Oct.	Nov.	Dec.	Jan.	Mar.	May
Open	8.90	8.90	8.82	8.82b	...	...
High	9.05	9.05	9.02	9.02	...	...
Low	10.05	10.05	10.00	10.02a	...	...
Close	10.15	10.15	10.15	10.15a	...	10.30a

Sales: 1,640,000 lbs.

Open interest at close, Wed., Sept. 28: Oct., 149; Nov., 104; Dec., 172; Jan., 41; Mar., 8 and May, 17 lots.

SLICED BACON PRODUCTION

Sliced bacon production for the week ended Sept. 3, amounted to 23,655,120 lbs., according to a U. S. Department of Agriculture report.

CHICAGO LARD STOCKS

Stocks of drummed lard in Chicago were reported in pounds by the Board of Trade as follows:

	Sept. 23	Sept. 25
P.S. lard (a)	4,559,322	5,637,160
P.S. lard (b)	1,480,042	9,099,219
Dry rend. (a)	6,039,364	14,736,379
Dry rend. (b)	...	...

(a) Made since Oct. 1, 1959.

(b) Made previous to Oct. 1, 1959.

MONTHLY RATIOS

Hog and corn prices, basis Chicago and hog-corn price ratios by months were listed by the USDA as follows:

	B.&G. cwt.	Corn Bu.	Hog-corn Ratios
Aug. 1960	\$16.94	\$1.185	14.3
July 1960	17.62	1.197	14.7
Aug. 1959	14.58	1.272	11.5

CUT-OUT MARGINS FALL OFF SHARPLY

(Chicago costs, credits and realizations for Monday and Tuesday)

Cut-out margins last week plunged to their widest negative positions in weeks, despite substantial markups on some of the more popular cuts. The sweeping reductions in margins came about as the higher returns from sales of pork were far insufficient to keep abreast with the sharp hike in the hog market.

	-180-220 lbs.— Value		-220-240 lbs.— Value		-240-270 lbs.— Value	
	per cwt. alive	per cwt. fin. yield	per cwt. alive	per cwt. fin. yield	per cwt. alive	per cwt. fin. yield
Lean cuts	\$12.13	\$17.58	\$11.43	\$16.19	\$10.91	\$15.41
Fat cuts, lard	4.66	6.71	4.78	6.77	4.71	6.56
Ribs, trimmings, etc.	2.06	2.99	1.81	2.60	1.73	2.46
Cost of hogs	17.50	17.50	17.50	17.50	17.50	17.50
Condemnation loss	08	08	08	08	08	08
Handling, overhead	2.64	2.64	2.40	2.40	2.18	2.18
TOTAL COST	20.22	29.30	20.17	28.61	19.76	27.40
TOTAL VALUE	18.84	27.28	18.02	25.56	17.35	24.46
Cutting margin	-1.38	-2.02	-2.15	-3.05	-2.41	-3.27
Margin last week	-.49	-.72	-1.30	-1.84	-1.58	-2.20

PACIFIC COAST WHOLESALE LARD PRICES

	Los Angeles Sept. 27	San Francisco Sept. 27	No. Portland Sept. 27
1-lb. cartons	14.50@16.50	16.00@18.00	14.00@16.00
50-lb. cartons & cans	13.50@15.50	16.00@17.00	None quoted
Tierces	13.00@14.00	15.00@16.00	13.00@15.00

PACKERS' WHOLESALE

LARD PRICES

	Wednesday, Sept. 28, 1960
Refined lard, drums, f.o.b. Chicago	\$12.75
Refined lard, 50-lb. fiber cubes, f.o.b. Chicago	12.25
Kettle rendered, 50-lb. tins, f.o.b. Chicago	13.75
Leaf, kettle rendered, drums, f.o.b. Chicago	13.75
Lard flakes	13.50
Standard shortening, North & South, delivered	19.50
Hydrogenated shortening, N. & S., drums, del'vd.	19.75

VEGETABLE OILS

	Wednesday, Sept. 28, 1960
Crude cottonseed oil, f.o.b. Valley	9½
Texas	9½
Southeast	9½@9½
Corn oil in tanks, f.o.b. mills	12½
Soybean oil, f.o.b. Decatur	9b
Cocunut oil, f.o.b. Pacific Coast	12½a
Peanut oil, f.o.b. mills	15½a
Cottonseed foots: Midwest, West Coast	1½
East	1½
Soybean foots: Midwest	1½

WEEK'S LARD PRICES

	P.S. or D.R. cash	Dry rend. tins	Ref. in 50-lb. drums (Open Mkt.)
Sept. 23	9.25n	9@9½	11.50n
Sept. 26	9.25n	9@9½	11.50n
Sept. 27	9.25n	8½@9	11.25n
Sept. 28	9.25n	9.00	11.25n
Sept. 29	9.00n	9.00	11.25n

Note: add ½¢ to all prices ending in 2 or 7.

a-nominal, a-asked, b-bid

HOG-CORN

RATIOS COMPARED

The hog-corn ratio based on barrows and gilts at Chicago for the week ended Sept. 24, 1960, was 14.6, the U. S. Department of Agriculture has reported. This ratio compared with the 13.8 ratio for the preceding week and 12.2 a year ago. These ratios were calculated on the basis of No. 3 yellow corn selling at \$1.141, \$1.174 and \$1.133 per bu. during the three periods, respectively.

OLEOMARGARINE

	Wednesday, Sept. 28, 1960
White domestic vegetable, 30-lb. cartons	22
Yellow quarters, 30-lb. cartons	34½
Milk churned pastry, 750-lb. lots, 30's	24½
Water churned pastry, 750-lb. lots, 30's	22½
Bakers, drums, tons	18½@18½

OLEO OILS

	Prime oleo	Extra oleo	Prime oleo
oleo stearine, bags	11½	12½	13½
oleo oil (drums)	12½	13½	14½

N. Y. COTTONSEED OIL CLOSINGS

	Closing cottonseed oil futures in New York were as follows:
Sept. 23—Oct., 11.41-42; Dec., 11.38; Mar., 11.52; May, 11.94-95	
July, 11.56; Sept., 11.40b-52a and Oct., 11.41b	
Sept. 26—Oct., 11.45; Dec., 11.45; Mar., 11.56; May, 11.58b-50a; July, 11.63; Sept., 11.54b-75a and Oct., 11.55b	
Sept. 27—Oct., 11.53; Dec., 11.54; Mar., 11.68; May, 11.71; July, 11.75b-77a; Sept., 11.65b-70a and Oct., 11.64b	
Sept. 28—Oct., 11.59; Dec., 11.54; Mar., 11.74b-75a; May, 11.78b-80a; July, 11.83-84; Sept., 11.77b-83a and 11.75b	
Sept. 29—Oct., 11.41b-46a; Dec., 11.54; Mar., 11.66; May, 11.70-71; July, 11.70-68; Sept., 11.60b and Oct., 11.55b	
a-asked, b-bid.	

BY-PRODUCTS ... FATS AND OILS

BY-PRODUCTS MARKET

(F.O.B. Chicago, unless otherwise indicated)
Wednesday, Sept. 28, 1960

BLOOD	
Unground, per unit of ammonia, bulk	4.50n
DIGESTER FEED TANKAGE MATERIALS	
Wet rendered, unground, loose	
Low test	5.25n
Med. test	4.75n
High test	4.50n

PACKINGHOUSE FEEDS

Carlots, ton	
50% meat, bone scraps, bagged	\$70.00@ 77.50
50% meat, bone scraps, bulk ..	67.50
60% digester tankage, bagged ...	70.00@ 77.50
60% digester tankage, bulk	67.50
60% blood meal, bagged	90.00@ 115.00
Steam bone meal, 50-lb. bags (specially prepared)	95.00
60% steam bone meal, bagged ...	80.00

FERTILIZER MATERIALS

Feather tankage, ground, per unit ammonia (85% prot.)	*4.00
Hoof meal, per unit ammonia	16.75@ 7.00

DRY RENDERED TANKAGE

Low test, per unit protein	1.20n
Medium test, per unit prot.	1.15n
High test, per unit prot.	1.05n

GELATINE AND GLUE STOCKS

Bone stock, (gelatine), ton	13.50
Jaws, feet (non-gel), ton	1.00@ 3.00
Trim bone, ton	1.00@ 3.00
Pigskins (gelatine), lb.	7 3/4@ 7 1/2
Pigskins (rendering) piece	7 1/2@ 12 1/2

ANIMAL HAIR

Winter coll, dried, c.a.f. mid-east, ton	80.00@ 85.00
Winter coll, dried, mid-west, ton	70.00@ 75.00
Cattle switches, piece	1 1/2@ 2 1/2
Summer processed (Apr.-Oct.)	
gray, lb.	13@ 14
*Del. mid-west, 1 del. mid-east, n—nom., a—asked	

TALLOW and GREASES

Wednesday, Sept. 28, 1960

Inquiry was more or less spotty on the lower and medium grade inedible tallows and greases late last week, but a good demand prevailed on bleachable fancy tallow and on choice white grease, all hog, and especially for local destination. Bleachable fancy tallow sold in fair to good trade at 5 1/2¢, c.a.f. Chicago. Choice white grease, all hog, was bid at 6 3/4¢, c.a.f. Chicago, but it was offered sparsely at 6 3/4¢.

Only moderate buying interest was evident on bleachable fancy tallow at 5 3/4¢@5 3/4¢, c.a.f. New York. Choice white grease, all hog, was reportedly bid at 7 1/4¢@7 3/8¢, also New York. Edible tallow was inclined to softness and sold lower late last week, down from 8¢ to 7.82¢, c.a.f. Chicago. Edible tallow was also available at 7 1/2¢, f.o.b. River points, but buyers were standing off.

Special tallow sold at the start of the new week at 4 3/8¢@4 3/4¢ and yellow grease at 4 1/4¢, all c.a.f. Chicago. Special tallow was bid at 5 1/4¢@5 3/8¢

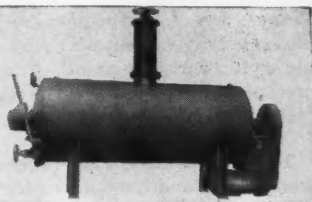
and yellow grease at 4 3/4¢@4 7/8¢, delivered East, with price depended on quality of stock. Some choice white grease, all hog sold at 6 3/4¢, c.a.f. Chicago. Additional tanks of bleachable fancy tallow traded at 5 1/2¢, c.a.f. Chicago, and the same price was bid for more.

Choice white grease, all hog, was bid at 7 3/8¢, c.a.f. New York, and indications were in the market that a user was willing to pay 1/8¢ higher on a few tanks for quick shipment. Edible tallow sold at 7 3/4¢, c.a.f. Chicago. Volume was fair. Edible tallow was also offered at 7 3/8¢, f.o.b. River, and bid at 7 1/4¢.

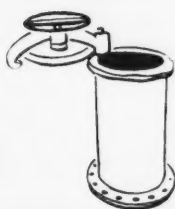
The inedible fats market was mostly steady to firm at midweek. Bleachable fancy tallow sold at 5 1/2¢, c.a.f. Chicago. Yellow grease sold at 4 1/2¢ and B-white grease at 4 5/8¢, also c.a.f. Chicago. Choice white grease, all hog, was bid at 7 1/2¢, c.a.f. New York, but offered 1/8¢ higher. It was also reported, but unconfirmed, that some traded at 7 5/8¢, c.a.f. East.

Bleachable fancy tallow was sought at 5 3/4¢@5 3/8¢, delivered New York, and the price depended on quality of stock. Edible tallow was

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available at 7¼¢, c.a.f. Chicago, and some sold at that basis. Edible tallow was also offered at 7¾¢, f.o.b. River, with buyer inquiry slightly lower. Special tallow was bid at 4½¢@4¾¢, c.a.f. Chicago, the outside price on the better material. Special tallow was also bid at 5¼¢, c.a.f. East. Choice white grease, all hog, was bid at 6¾¢, c.a.f. Chicago.

TALLOW: Wednesday's quotations; edible tallow, 7¼¢, Chicago basis and 7¾¢, f.o.b. River; original fancy tallow, 5¾¢; bleachable fancy tallow, 5½¢; prime tallow, 5¼¢; special tallow, 4½¢@4¾¢; No. 1 tallow, 4¼¢, and No. 2 tallow, 3¾¢.

GREASES: Wednesday's quotations: choice white grease, all hog, 6¾¢; B-white grease, 4½¢; yellow grease, 4¼¢, and house grease, 4¢.

EASTERN BY-PRODUCTS

New York, Sept. 28, 1960

Dried blood was quoted today at \$4 per unit of ammonia. Wet rendered tankage was listed at \$4@4.25 per unit of ammonia and dry rendered tankage was priced at \$1@1.05 per protein unit.

July, Seven-Month Leather Output Below June, Year Ago

Leather production declined sharply in July to 1,858,000 pieces from the June level of 2,669,000 pieces, according to a Tanners' Council report. The July volume was also smaller than last year's 2,314,000 pieces for the same month. The seven-month 1960 volume of 17,435,000 pieces also lagged behind last year's 18,379,000 for the same period.

The bulk of July, 1960, production was in goat and kid leather, volume of which was 1,301,000 pieces, down from 1,714,000 in June and 1,894,000 in July, 1959. Production of cattlehide and kip side leather amounted to 1,497,000 pieces in July, down from 1,946,000 in June and 1,598,000 pieces in July of last year. Production of all other classes of leathers was down from all other periods compared in the report.

EDIBLE OIL SHIPMENTS

Shipments of shortening and edible oils, as reported to the Institute of Shortening and Edible Oils totaled 420,655,000 lbs. in August. Of this volume, 200,989,000 lbs., or 47.7 per cent were shortening and 119,710,000 lbs., or 26.5 per cent were salad or cooking oils. Shipments of oleomargarine oils and/or fats totaled 99,956,000 lbs., or 23.8 per cent of the total. Shipments in August, 1959, amounted to 391,242,000 lbs.

CHICAGO HIDES

Wednesday, Sept. 28, 1960

BIG PACKER HIDES: A fair volume of hides sold last week and mostly at steady prices, the exception being light native cows, which advanced ½¢ on Northern and River production. River heavy native steers sold well at 13½¢, with some low freight stock at 14¢. Some light native steers moved at 16½¢, River point, while lights and ex-lights moved at 16½¢@18¢, from River points. River-St. Paul heavy native cows sold steady at 13½¢. Colorado steers sold at 9½¢ and butt-brands at 11¢, both steady. Northern branded cows sold in volume at 11½¢, while Southwestern product brought a premium of 12½¢. About 500 River bulls sold at 10¢.

On Monday of the new week, a light demand was reported at steady asking prices. On Tuesday, butts sold at 11½¢ and Colorado's at 10¢, both up ½¢. Some trading on Northern branded cows was noted at 12¢, up ½¢ as was a car of Northern light native cows at 16½¢.

On Wednesday, some heavy native cows sold ½¢ higher. Heavy native steers sold steady at 13½¢, River, and at 14¢, short freight point. Late midweek, Northern branded cows and branded steers sold ½¢ above Tuesday's levels and Northern light native cows sold at 16½¢. A car of St. Joseph's sold at 17½¢ and a car of Kansas City's at 18¢.

SMALL PACKER AND COUNTRY HIDES: A stronger small packer market was apparent this week, with sales of Midwestern 50/52's at 13¢@14¢, with the bulk of midweek sales at 13½¢@14¢. Midwestern 60/62-lb. averages were moved mostly at 11½¢@12¢. Country 50/52-lb. locker-butchers sold mostly at 11¢ f.o.b. shipping points. Some movement of 48/50-lb and 50/52-lb. renderers were reported at 10¢ f.o.b. shipping points and No. 3's, same average, at 7½¢@8¢. Choice Northern trimmed horsehides were mostly steady at 8.00@8.25 f.o.b. shipping points and ordinary lots were pegged at 6.00@6.25.

CALFSKINS AND KIPSKINS: Big packer Northern light calf was bid at 55¢, or 5¢ over last sales, with a car offered at 60¢, but unsold. Last sale of Northern heavy calf was at 52½¢. River kips last sold at 42½¢, with some Southeastern's recently moved at 40¢, steady. River overweights remained steady at 34¢. Small packer allweight calf was steady at 38¢@40¢ and allweight kips firmed to 31¢@33¢. Country all-

weight calf moved mostly at 24¢@25¢ and allweight kips at 20¢@21¢. Regular slunks were unchanged at 1.25 nominal.

SHEEPSKINS: Shearlings were steady to easier, with Northern-River No. 1's going mostly at .90@1.00 and No. 2's at .70@.75. Southwestern shearlings sold at 1.30@1.35 and a few No. 2's were offered at 1.00. Midwest lamb pelts last brought 1.60@1.65. Southwesterns were nominal at 1.75. Full wool dry pelts were quoted at .21 nominal. Pickled skins improved over recent weeks, with lambs quoted at 9.00@9.50 per dozen, and a few at 11.00.

CHICAGO HIDE QUOTATIONS

PACKER HIDES		Wednesday, Sept. 28, 1960	Cor. date 1959
Lgt. native steers	..17	@ 17½	25½
Hvy. nat. steers	..13½	@ 14	20½ @ 21n
Ex. lgt. nat. steers	..18½	@ 20n	27½n
Butt-brand. steers	..	11½	18½n
Colorado steers	..	10	17½n
Hvy. Texas steers	..	11n	18½n
Light Texas steers	..	15n	23½n
Ex. lgt. Texas steers	..	16½n	25½n
Heavy native cows	..14	@ 14½	23
Light nat. cows	..16½	@ 17½	26n
Branded cows	..	12	21 @ 21½n
Native bulls	..10	@ 10½n	16½ @ 17n
Branded bulls	..9	@ 9½n	15½ @ 16n
Calfskins:			
Northern, 10/15 lbs.	..	52½n	57½n
10 lbs./down	..	55b	70n
Kips, Northern native, 15/25 lbs.	..	42½n	53n

SMALL PACKER HIDES

STEERS AND COWS:			
60/62-lb. avg.	..11½	@ 12n	18 @ 19n
50/52-lb. avg.	..13½	@ 14n	21 @ 22n

SMALL PACKER SKINS

Calfskins, all wts.	..38	@ 40	50 @ 55n
Kipskins, all wts.	..31	@ 33	44 @ 45n

SHEEPSKINS

Packer shearlings:			
No. 1	..	.90 @ 1.00	2.00 @ 2.50
No. 2	..	.70 @ .75	1.00 @ 1.40
Dry Pelts	..	.21n	.21n
Horsehides, untrim.	..8.25 @ 8.50n	12.25 @ 12.50	
Horsehides, trim.	..8.00 @ 8.25	12.00 @ 12.25	

N. Y. HIDE FUTURES

Friday, Sept. 23, 1960				
	Open	High	Low	Close
Oct. ...	14.11b	14.45	14.30	14.31
Jan. ...	14.40b	14.65	14.50	14.55b-.55a
Apr. ...	14.62b	14.75	14.75	14.75b-.90a
July ...	14.80b	...	...	14.90b-15.10a
Oct. ...	15.00b	...	...	15.00b-.30a
Sales: 15 lots.				
Monday, Sept. 26, 1960				
Oct. ...	14.30b	14.35	14.12	14.12
Jan. ...	14.50b	14.58	14.50	14.37b-.41a
Apr. ...	14.70b	14.75	14.75	14.55b-.70a
July ...	14.90b	...	...	14.70b-.90a
Oct. ...	15.05b	...	...	14.80b-15.10a
Sales: 83 lots.				
Tuesday, Sept. 27, 1960				
Oct. ...	14.01b	14.15	14.13	14.14
Jan. ...	14.48	14.48	14.30	14.32
Apr. ...	14.60b	...	...	14.46b-.62a
July ...	14.65b	14.71	14.71	14.71
Oct. ...	14.80b	...	...	14.85b-15.05a
Sales: 45 lots.				
Wednesday, Sept. 28, 1960				
Oct. ...	14.10b	14.20	14.15	14.17
Jan. ...	14.25b	14.40	14.35	14.35b-.43a
Apr. ...	14.45b	14.50	14.50	14.47b-.85a
July ...	14.60b	...	...	14.60b-.85a
Oct. ...	14.75b	...	...	14.80b-15.10a
Sales: 23 lots.				
Thursday, Sept. 29, 1960				
Oct. ...	14.10b	14.22	14.17	14.22
Jan. ...	14.25b	14.46	14.45	14.45-46
Apr. ...	14.45b	...	...	14.56b-.60a
July ...	14.65b	...	...	14.70b-.85a
Oct. ...	14.80b	...	...	14.85b-15.10a
Sales: 11 lots.				

LIVESTOCK MARKETS... Weekly Review

N. S. Yards Launches Second "Know-Your-Hog" Contest; All Patrons Of Market Center Eligible

As a means of emphasizing to producers the commercial grades and market standards of hogs and pork, the various interests at National Stock Yards have launched their second "Know-Your-Hog" contest, which began September 20 and will end October 25. The contest, which features weekly prizes and a grand prize, is open to all patrons of the market.

Each Tuesday, three pens of five hogs each will be exhibited in a large tent on the lawn in front of the exchange building from 7 to 11 a.m., daylight saving time. Farmers, stockmen, truckers, vocational-agriculture and 4-H Club groups are invited to appraise the animals on an official contest card.

Each pen of five animals will be evaluated on three points—live weight, USDA grade, and lean cuts as a per cent of live weight. One hog in each pen will be marked and evaluated on the following points—body length, average backfat and loin eye area in sq. in.

The hogs will be slaughtered and carcass results obtained at one of the participating packing plants. Results will be announced at a seminar to be held at 1:30 p.m. in the exchange assembly hall each Wednesday following the contest. Also, university specialists will discuss matters of importance to swine producers.

Assisting in the project will be representatives of the state and county extension services of Missouri and Illinois. Sponsors of the event are St. Louis National Stock Yards Co., the National Stock Yards National Bank, all live stock selling agencies, Heil Packing Co., Hunter Packing Co., Krey Packing Co. and Swift & Company. Delmar Valine of the National Stock Yards Co. is contest chairman.

LIVESTOCK RECEIPTS AT 56 MARKETS

A summary of receipts of livestock at 56 public markets, July, 1960 and 1959, as reported by the U. S. Department of Agriculture:

	CATTLE			CALVES		
	Salable receipts	Total receipts	Local slaughter	Salable receipts	Total receipts	Local slaughter
July 1960	1,201,682	1,399,521	724,129	162,126	199,535	80,540
July 1959	1,287,443	1,464,356	732,730	180,284	234,925	84,219
7 mo. 1960	8,963,583	10,284,489	5,202,958	1,204,210	1,453,273	599,203
7 mo. 1959	8,876,344	10,243,744	5,138,054	1,228,966	1,560,851	635,326
5-yr. av. (July 1955-59)	1,495,920	1,739,898	962,533	247,175	327,998	166,007
	HOGS			SHEEP AND LAMBS		
	Salable receipts	Total receipts	Local slaughter	Salable receipts	Total receipts	Local slaughter
July 1960	1,521,282	2,061,464	1,357,260	510,235	875,423	442,464
July 1959	1,952,527	2,622,852	1,715,619	580,464	912,485	445,722
7 mo. 1960	13,709,789	18,469,521	12,558,735	3,773,395	6,504,101	3,384,423
7 mo. 1959	14,317,076	19,353,181	13,283,541	4,130,848	6,825,624	3,517,058
5-yr. av. (July 1955-59)	1,701,348	2,309,502	1,538,904	643,010	1,022,422	503,283

SLAUGHTER STEERS AND HEIFERS

Steers and heifers sold out of first hands for slaughter at seven markets in Aug., 1960-59; numbers, costs and percentages are shown below, as follows:

STEERS, AUGUST, 1960-59					
—Number of head—		Pet. of total		Av. price, cwt.	
	Aug. 1960	Aug. 1960	Aug. 1959	Aug. 1960	Aug. 1959
Prime	14,306	13,416	3.4	26.25	28.59
Choice	228,440	187,594	54.2	24.67	27.34
Good	153,082	126,563	36.3	23.16	26.04
Standard	22,722	14,787	5.4	20.22	23.99
Commercial	19	.....	.....	20.00	.....
Utility	2,951	2,022	7	18.07	22.00
All grades	421,520	344,882	.....	23.95	26.78
HEIFERS, AUGUST, 1960-59					
	Aug. 1960	Aug. 1960	Aug. 1959	Aug. 1960	Aug. 1959
Prime	2,651	1,527	1.8	25.11	27.71
Choice	74,003	72,645	49.0	23.66	26.43
Good	64,688	47,712	42.8	22.20	25.17
Standard	8,490	6,046	5.6	19.37	23.21
Utility	1,229	1,340	8	18.55	20.49
All grades	151,061	129,270	.....	22.80	25.79

LIVESTOCK PRICES AT LEADING MARKETS

Livestock prices at five western markets on Tuesday, Sept. 27, were reported by the Agricultural Marketing Service, Livestock Division, as follows:

HOGS:	N.S. Yds.	Chicago	Sioux City	Omaha	St. Paul
BARROWS & GILTS:					
U.S. No. 1:					
180-200	.....	\$17.50-18.25	\$16.50-17.35	.....	\$16.50-17.75
200-220	.....	18.00-18.25	17.35-17.50	\$17.25-17.50	17.50-17.75
220-240	.....	18.00-18.25	17.35-17.50	\$17.25-17.50	17.50-17.75
U.S. No. 2:					
180-200	.....	.....	16.50-17.35	.....	.....
200-220	.....	.....	17.25-17.50	.....	.....
220-240	.....	.....	17.25-17.50	.....	.....
240-270	.....	.....	17.00-17.35	.....	.....
U.S. No. 3:					
200-220	\$17.50-17.65	17.50-17.65	.....	.....	17.00-17.25
220-240	17.50-17.65	17.50-17.65	.....	.....	17.00-17.25
240-270	17.25-17.65	17.25-17.65	.....	.....	17.00-17.25
270-300	16.25-17.50	.....	16.25-17.25	16.25-17.00	.....
U.S. No. 1-2:					
180-200	17.85-18.00	17.25-18.00	16.50-17.35	16.00-17.25	16.00-17.75
200-220	17.85-18.10	17.85-18.00	17.25-17.50	17.25-17.50	17.50-17.75
220-240	17.85-18.00	17.85-18.00	17.25-17.50	17.25-17.50	17.50-17.75
U.S. No. 2-3:					
200-220	17.50-17.75	17.50-17.75	17.10-17.35	17.00-17.25	17.00-17.25
220-240	17.50-17.75	17.50-17.75	17.10-17.35	17.00-17.25	17.00-17.25
240-270	17.25-17.75	17.35-17.75	17.10-17.35	16.50-17.00	17.00-17.25
270-300	16.25-17.60	.....	16.25-17.25	16.25-17.00	.....
U.S. No. 1-2-3:					
180-200	17.50-17.85	17.00-17.85	16.50-17.35	15.50-17.00	16.00-17.25
200-220	17.60-18.00	17.65-17.85	17.10-17.35	17.00-17.25	17.00-17.25
220-240	17.60-17.85	17.65-17.85	17.10-17.35	17.00-17.25	17.00-17.25
240-270	17.35-17.85	17.50-17.75	17.00-17.35	16.50-17.25	17.00-17.25
SOWS:					
U.S. No. 1-2-3:					
180-270	15.50-15.75	.....	.....	15.50-16.25	.....
270-330	15.25-15.75	.....	15.50-16.25	15.50-16.25	15.50-15.75
330-400	14.25-15.75	15.00-16.50	15.00-15.50	14.25-15.50	14.00-15.50
400-550	13.50-14.50	13.75-15.25	13.50-15.00	14.00-14.75	13.25-14.50

SLAUGHTER CATTLE & CALVES:

STEERS:					
Prime:					
900-1100	.....	25.50-26.25	25.00-25.75	24.75-25.50	.....
1100-1300	.....	25.25-27.00	25.00-25.75	24.75-25.50	.....
1300-1500	.....	24.50-27.00	24.50-25.50	24.00-25.50	.....
Choice:					
700-900	23.50-25.25	.....	23.00-25.00	.....	.....
900-1100	24.00-25.50	24.25-25.75	23.25-25.00	22.75-24.75	23.50-25.25
1100-1300	24.00-25.50	24.00-25.75	23.25-25.00	22.75-24.75	23.25-25.25
1300-1500	23.50-25.25	23.75-25.25	23.00-25.00	22.25-24.75	23.00-24.75
Good:					
700-900	21.00-24.00	22.00-24.25	21.25-23.25	20.75-22.75	21.25-23.50
900-1100	21.50-24.00	22.00-24.25	21.25-23.25	21.00-22.75	21.25-23.50
1100-1300	21.25-24.00	21.75-24.00	21.00-23.25	21.00-22.75	21.25-23.50
Standard,					
all wts.	18.50-21.50	21.00-22.00	18.50-21.00	18.50-21.00	18.00-21.25
Utility,					
all wts.	16.00-19.00	19.00-21.00	17.00-18.50	17.00-18.50	16.00-18.00
HEIFERS:					
Prime:					
900-1100	.....	24.25-24.75	24.00-24.50	24.00-24.50	.....
Choice:					
700-900	23.00-24.50	22.75-24.25	22.00-24.00	22.25-24.00	22.25-23.75
900-1100	22.75-24.25	22.75-24.25	22.00-24.00	22.25-24.00	22.25-23.75
Good:					
600-800	20.00-23.00	20.75-22.75	19.75-22.00	19.50-22.25	20.25-22.25
800-1000	20.00-23.00	20.75-22.75	19.75-22.00	19.50-22.25	20.25-22.25
Standard,					
all wts.	16.50-20.00	18.50-20.75	17.50-19.75	17.50-19.50	17.50-20.25
Utility,					
all wts.	15.00-17.00	15.00-18.50	15.50-17.50	16.00-17.50	15.50-17.50
COWS, All wts.:					
Commercial	14.50-16.00	14.25-16.50	15.25-16.25	15.25-16.25	15.00-16.00
Utility	13.00-14.50	14.00-16.00	13.75-15.50	13.75-15.50	13.50-15.00
Cutter	12.00-13.50	13.00-15.25	12.85-14.00	13.00-14.00	12.00-13.50
Canner	9.50-12.50	11.00-13.00	12.00-13.00	12.00-13.25	11.00-12.00
BULLS (Yrfs. Excl.) All weights:					
Commercial	17.50-18.50	16.50-20.00	18.00-19.50	16.00-18.75	18.00-19.00
Utility	16.50-18.00	18.00-19.50	18.00-19.50	16.00-18.50	18.00-19.50
Cutter	14.00-17.00	15.50-18.00	16.00-17.50	14.50-16.00	15.00-18.00
VEALERS, All weights:					
Ch. & pr.	28.00	25.00	.....	23.00	30.00
Std. & gd.	19.00-24.00	17.00-24.00	.....	15.00-20.00	19.00-29.00
CALVES (500 lbs. down)					
Ch. & pr.	20.00-23.00	.....	.....	.....	21.00-23.00
Std. & gd.	14.00-21.00	.....	.....	.....	16.00-21.00
SHEEP & LAMBS:					
LAMBS (110 lbs. down):					
Prime	19.00-19.50	19.50-20.00	18.00-18.50	18.50-19.00	18.50-19.00
Choice	17.00-19.00	18.50-20.00	17.25-18.00	17.50-18.50	17.50-18.50
Good	16.00-17.50	16.00-18.50	16.50-17.25	15.50-17.50	16.00-17.50
LAMBS (105 lbs./down, shorn):					
Prime	.....	.....	18.00-18.50	18.50-18.75	.....
Choice	.....	.....	17.25-18.00	18.50	.....
Good	.....	.....	16.50-17.25	.....	.....
EWES:					
Gd. & ch.	3.75-4.25	4.00-5.00	2.00-4.50	3.00-4.25	3.50-4.00
Cull & util.	3.00-4.00	4.00-4.50	3.00-4.00	2.50-4.50	3.00-3.50

CORN BELT DIRECT TRADING

Des Moines, Sept. 28—Prices on hogs at 14 plants and about 30 concentration yards in interior Iowa and southern Minnesota, as quoted by the U. S. Department of Agriculture:

BARROWS & GILTS:

U.S. No. 1, 200-220	\$16.50@17.25
U.S. No. 1, 220-240	16.50@17.25
U.S. No. 2, 200-220	16.25@17.00
U.S. No. 2, 220-240	16.25@17.00
U.S. No. 2, 240-270	15.85@16.90
U.S. No. 3, 200-220	15.85@16.65
U.S. No. 3, 220-240	15.85@16.65
U.S. No. 3, 240-270	15.55@16.55
U.S. No. 3, 270-300	15.10@16.10
U.S. No. 1-2, 200-240	16.50@17.10
U.S. No. 2-3, 200-240	16.25@16.75
U.S. No. 2-3, 240-270	15.75@16.65
U.S. No. 2-3, 270-300	15.25@16.25
U.S. No. 1-3, 180-200	15.00@16.75
U.S. No. 1-3, 200-220	16.25@17.00
U.S. No. 1-3, 220-240	16.25@17.00
U.S. No. 1-3, 240-270	15.85@16.85

SOWS:

U.S. No. 1-3, 270-330	14.50@15.90
U.S. No. 1-3, 330-400	14.00@15.40
U.S. No. 1-3, 400-550	12.50@14.75

Corn Belt hog receipts, as reported by the USDA:

	This week est.	Last week actual	Last year actual
Sept. 22	70,000	59,000	74,000
Sept. 23	49,000	49,000	73,000
Sept. 24	35,000	35,000	51,000
Sept. 26	78,000	81,000	98,000
Sept. 27	62,000	63,000	77,000
Sept. 28	60,000	70,000	71,000

LIVESTOCK PRICES AT ST. JOSEPH

Livestock prices at St. Joseph, Tuesday, Sept. 27, were as follows:

CATTLE:	Cwt.
Steers, ch. & pr.	\$24.00@25.25
Steers, good	21.00@24.00
Heifers, gd. & ch.	20.50@23.50
Cows, util. & com'l.	13.50@15.00
Cows, can. & cut.	11.50@13.50
Bulls, util. & com'l.	15.00@17.50

VEALERS:	Cwt.
Good & prime	18.00@23.00
Calves, gd. & ch.	17.00@20.00

BARROWS & GILTS:	Cwt.
U.S. No. 3, 220/240	16.75@17.00
U.S. No. 3, 240/270	16.50@17.00
U.S. No. 3, 270/300	none qtd.
U.S. No. 1-2, 180/200	16.50@17.50
U.S. No. 1-2, 200/220	17.35@17.65
U.S. No. 1-2, 220/240	17.35@17.75
U.S. No. 2-3, 220/240	16.75@17.00
U.S. No. 2-3, 240/270	16.50@17.00
U.S. No. 1-3, 180/200	16.50@17.25
U.S. No. 1-3, 200/220	16.50@17.25
U.S. No. 1-3, 220/240	16.75@17.50
U.S. No. 1-3, 240/270	16.75@17.35

SOWS, U.S. No. 1-3:	Cwt.
270/330 lbs.	15.25@15.75
330/400 lbs.	14.50@15.25
400/550 lbs.	13.75@14.75

LAMBS:	Cwt.
Choice & prime	17.50@18.00
Good & choice	15.50@17.50

LIVESTOCK PRICES AT DENVER

Livestock prices at Denver on Tuesday, Sept. 27, were as follows:

CATTLE:	Cwt.
Steer, choice	\$23.65@25.25
Steers, good	20.00@23.65
Heifers, gd. & ch.	21.00@24.25
Cows, utility	14.50@16.75
Cows, can. & cut.	12.00@14.25

BARROWS & GILTS:	Cwt.
U.S. No. 1-2, 200/230	17.85@18.10
U.S. No. 1-3, 190/250	17.50@17.85
U.S. No. 2-3, 220/260	17.00@17.65

SOWS, U.S. No. 1-3:	Cwt.
297/465 lbs.	15.00@16.00
475/550 lbs. No. 3	12.00@12.50

LAMBS:	Cwt.
Choice & prime	18.00@19.25
Good & choice	16.75@18.00

LIVESTOCK PRICES AT INDIANAPOLIS

Livestock prices at Indianapolis, Tuesday, Sept. 27, were as follows:

CATTLE:	Cwt.
Steers, ch. & pr.	\$24.00@25.25
Steers, good	22.00@23.50
Heifers, gd. & ch.	21.50@23.50
Cows, util. & com'l.	13.50@16.00
Cows, can. & cut.	12.00@14.50
Bulls, util. & com'l.	17.00@19.00

VEALERS:	Cwt.
Choice	27.50@28.00
Good & choice	24.00@27.50
Stand. & good	19.00@24.00

BARROWS & GILTS:	Cwt.
U.S. No. 1, 200/240	18.00@18.25
U.S. No. 3, 200/220	17.50@17.65
U.S. No. 3, 220/240	17.50@17.60
U.S. No. 3, 240/270	17.25@17.60
U.S. No. 1-2, 180/200	17.50@18.10
U.S. No. 1-2, 200/220	18.00@18.25
U.S. No. 1-2, 220/240	17.85@18.15
U.S. No. 2-3, 200/220	17.65@17.85
U.S. No. 2-3, 220/240	17.65@17.85
U.S. No. 2-3, 240/270	17.25@17.75
U.S. No. 2-3, 270/300	16.75@17.35
U.S. No. 1-3, 180/200	17.50@18.00
U.S. No. 1-3, 200/220	17.75@18.00
U.S. No. 1-3, 220/240	17.75@18.00
U.S. No. 1-3, 240/270	17.35@18.00

SOWS, U.S. No. 1-3:	Cwt.
270/330 lbs.	15.00@15.75
330/400 lbs.	14.50@15.25
400/550 lbs.	13.75@14.75

LAMBS:	Cwt.
Choice & prime	17.50@18.50
Good & choice	15.50@17.50

LIVESTOCK PRICES AT KANSAS CITY

Livestock prices at Kansas City, Tuesday, Sept. 27, were as follows:

CATTLE:	Cwt.
Steers, gd. & ch.	\$21.00@25.25
Steers, util. & std.	16.50@21.00
Heifers, gd. & ch.	20.00@24.00
Cows, util. & com'l.	13.50@16.00
Cows, can. & cut.	11.00@13.50
Bulls, util. & com'l.	15.50@18.00
Vealers, gd. & ch.	19.00@23.00
Calves, gd. & ch.	17.00@20.00

BARROWS & GILTS:	Cwt.
U.S. No. 1, 200/220	17.10@17.50
U.S. No. 2, 220/240	17.25@17.75
U.S. No. 3, 200/240	17.00@17.25
U.S. No. 3, 240/270	16.75@17.25
U.S. No. 1-2, 180/200	16.50@17.35
U.S. No. 1-2, 200/220	17.00@17.75
U.S. No. 1-2, 220/240	17.10@17.75
U.S. No. 2-3, 200/220	16.75@17.25
U.S. No. 2-3, 220/270	16.75@17.25
U.S. No. 2-3, 270/300	16.50@17.00
U.S. No. 1-3, 180/200	16.50@17.35
U.S. No. 1-3, 200/240	17.00@17.75
U.S. No. 1-3, 240/270	16.75@17.75

SOWS, U.S. No. 1-3:	Cwt.
180/330 lbs.	15.00@16.00
230/400 lbs.	14.25@15.25
400/550 lbs.	13.50@14.50

LAMBS:	Cwt.
Choice & prime	17.00@18.00
Good & choice	16.00@17.00

LIVESTOCK PRICES AT LOUISVILLE

Livestock prices at Louisville on Tuesday, Sept. 27, were as follows:

CATTLE:	Cwt.
Steers, gd. & ch.	\$22.00@24.25
Steers, util. & std.	17.00@21.00
Heifers, gd. & ch.	21.00@23.00
Heifers, util. & std.	16.00@20.00
Cows, cut. & util.	12.00@15.00
Cows, canner	8.00@12.00
Bulls, util. & com'l.	17.50@18.50

VEALERS:	Cwt.
Choice & prime	none qtd.
Good & choice	25.00@31.00
Calves, gd. & ch.	19.00@22.00

BARROWS & GILTS:	Cwt.
U.S. No. 1, 200/230	18.25
U.S. No. 1-2, 190/240	18.00@18.25
U.S. No. 2-3, 190/250	17.75@18.00
U.S. No. 1-3, 150/180	15.00@16.50

SOWS, U.S. No. 2-3:	Cwt.
300/350 lbs.	14.50@15.00
400/600 lbs.	14.00@14.50

LAMBS:	Cwt.
Choice & prime	17.00@18.50
Good & choice	15.00@16.50

WEEKLY LIVESTOCK SLAUGHTER

Slaughter of livestock at major centers during the week ended Sept. 24, 1960 (totals compared), as reported by the U. S. Department of Agriculture:

	Cattle	Calves	Hogs	Sheep
Boston, New York City area ¹	8,934	9,321	48,873	29,137
Baltimore, Philadelphia	9,326	2,546	27,106	4,079
Cincy., Cleve., Detroit, Indpls.	21,967	5,556	137,776	14,179
Chicago area	18,616	7,872	26,335	5,266
St. Paul-Wis. areas ²	34,104	23,032	105,719	20,702
St. Louis area ³	14,780	3,538	71,185	3,827
Sioux City-So. Dak. area ⁴	23,044		93,163	15,196
Omaha area ⁵	41,624	274	4,296	15,729
Kansas City	17,338		29,103	
Iowa-So. Minnesota ⁶	33,664	10,642	289,026	34,909
Louisville, Evansville, Nashville, Memphis	8,296	5,280	52,876	
Georgia-Florida-Alabama area ⁷	9,626	6,854	23,943	
St. Joseph, Wichita, Okla. City	23,019	1,484	39,453	10,157
Pt. Worth, Dallas, San Antonio	14,372	6,306	13,242	29,243
Denver, Ogden, Salt Lake City	18,536	207	15,938	42,754
Los Angeles, San Fran. areas ⁸	29,374	1,654	27,310	37,232
Portland, Seattle, Spokane	9,003	564	17,407	7,983
GRAND TOTALS	334,423	85,430	1,092,751	270,338
Totals same week 1959	312,606	73,667	1,287,746	268,866

¹Includes Brooklyn, Newark and Jersey City. ²Includes St. Paul, Minn., and Madison, Milwaukee, Green Bay, Wis. ³Includes St. Louis National Stockyards, E. St. Louis, Ill., and St. Louis, Mo. ⁴Includes Sioux Falls, Huron, Mitchell, Madison and Watertown, S. Dak. ⁵Includes Lincoln and Fremont, Neb., and Glenwood, Iowa. ⁶Includes Albert Lea, Austin and Winona, Minn., Cedar Rapids, Davenport, Des Moines, Dubuque, Estherville, Fort Dodge, Marshalltown, Mason City, Ottumwa, Postville, Storm Lake and Waterloo, Iowa. ⁷Includes Birmingham, Dothan and Montgomery, Ala., Albany, Atlanta, Augusta, Moultrie and Thomasville, Ga., Bartow, Hialeah, Jacksonville, Ocala and Quincy, Fla. ⁸Includes Los Angeles, San Francisco, So. San Francisco, San Jose and Vallejo, Calif.

LIVESTOCK PRICES AT 10 CANADIAN MARKETS

Average prices per cwt. paid for specific grades of steers, calves, hogs and lambs at 10 leading markets in Canada during the week ended Sept. 17, compared with same week in 1959, as reported to the Provisioner by the Canadian Department of Agriculture:

	GOOD STEERS All wts.	VEAL CALVES Gd. & Ch.	HOGS* Grade B ¹ Dressed	LAMBS Good Handyweights
	1960	1959	1960	1959
Toronto	\$23.50	\$26.37	\$31.00	\$34.00
Montreal	23.25	24.95	26.80	30.85
Winnipeg	22.30	25.54	29.40	31.78
Calgary	21.45	24.60	21.90	25.65
Edmonton	21.50	24.40	24.50	23.90
Lethbridge	21.50	24.50	25.75	25.00
Pr. Albert	21.40	23.75	21.50	24.50
Moose Jaw	21.50	23.20	22.25	26.50
Saskatoon	21.60	24.00	24.50	27.00
Regina	21.00	23.25	25.75	27.00

*Canadian government quality premium not included.

SOUTHERN LIVESTOCK RECEIPTS

Receipts at six packing plant stockyards located in Albany, Columbus, Moultrie, Thomasville, Ga., Dothan, Ala., and Jacksonville, Fla., week ended Sept. 24:

	Cattle and Calves	Hogs
Week ended Sept. 24 (estimated)	3,575	14,900
Week previous (six days)	3,646	16,282
Corresponding week last year	1,425	13,277

CANADIAN KILL

Inspected slaughter of livestock in Canada, week ended Sept. 17, compared:

	Week ended Sept. 17	same week 1959
CATTLE		
Western Canada	23,137	21,635
Eastern Canada	21,325	18,401
Totals	44,462	40,036
HOGS		
Western Canada	36,147	54,001
Eastern Canada	61,975	90,366
Totals	98,122	144,367
All hog carcasses graded	110,118	155,829

LIVESTOCK RECEIPTS

Receipts at 12 markets for the week ended Friday, Sept. 23, with comparisons:

	Cattle	Hogs	Sheep
Week to date	270,700	288,800	101,800
Previous week	273,900	285,700	146,700
Same wk. 1959	276,400	354,800	129,000

NEW YORK RECEIPTS

Receipts of livestock at Jersey City and 41st st., New York market for the week ended Sept. 24:

	Cattle	Calves	Hogs*	Sheep
Salable Total, (incl. directs)	512	152	2,886	5,680
Salable Total, (incl. directs)	93	24	none	none
*Includes hogs at 31st Street.				

PACIFIC COAST LIVESTOCK

Receipts at leading Pacific Coast markets, week ended Sept. 23:

	Cattle	Calves	Hog	Sheep
Los Ang.	3,100	550	600	
Stockton	2,650	350	1,250	575
N. P'tland	3,000	525	1,675	3,550

CLASSIFIED ADVERTISING

Undisplayed: set solid. Minimum 20 words, \$5.00; additional words, 20c each. "Position Wanted," special rate; minimum 20 words, \$3.50; additional words, 20c each.

Count address or box numbers as 8 words. Headlines, 75c extra. Listing advertisements, 75c per line. Displayed, \$11.00 per inch.

Unless Specifically Instructed Otherwise, All Classified Advertisements Will Be Inserted Over a Blind Box Number.

CLASSIFIED ADVERTISING PAYABLE IN ADVANCE PLEASE REMIT WITH ORDER

PLANTS FOR SALE OR RENT

U. S. GOV'T INSPECTED PLANT PHILA. MEAT DISTRICT
30,000 sq. ft. including freezers, coolers, boning rm., R.R. siding & T. G. loading. Ready to operate within overnight truck of the East Coast Market of over 1/3 of the population of the Nation.
An attractive bldg. at a reasonable price.
J. T. JACKSON CO. Realtors
Roosevelt Blvd. & Rising Sun Ave.
Philadelphia 20, Pa.
Phone DAvenport 4-2000

MICHIGAN PACKING PLANT
100 x 140, in excellent location. Excellent reputation. Kill 50 cattle, 100 hogs per week, 30,000 lb. sausage kitchen. Ample cooler and freezer space all well equipped. Priced for quick sale, \$55,000 plus inventory. Owner will stay one year with successor, or longer if needed. Don't say "IF I HAD ONLY KNOWN IT," too late. FS-442, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

TWO BED PACKING PLANT
FOR SALE OR LEASE: Plant in the southwest, also equipped for hog kill, and with modern sausage factory. Ample supply of boning beef and slaughter calves available in area.
FS-453, THE NATIONAL PROVISIONER
15 W. Huron St., Chicago 10, Ill.

PROCESSING PLANT FOR LEASE
MODERN: Well equipped meat processing plant for lease. Located on Texas gulf coast in metropolitan area. Sausage kitchen, smoke houses, freezer, rail cooler, work room, sales room and offices. 5,700 sq. ft. building, built in 1959 to government specifications. Plant is well equipped and now operating. Has government grading at present. FR-454, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

FOR SALE: Small modern complete packing plant. This plant is ideally situated in North Central Ohio, near Cleveland, Akron and Columbus. Is in very good condition as to buildings, equipment and trucks. We have a large kill floor, beef coolers, pork coolers, and quite modern sausage rooms. Our plant has operated profitably for about 40 years, but the owners wish to get out of the meat business. Reasonable terms can be made for this deal and more complete information can be furnished upon request. FS-455, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

BEEF SLAUGHTER PLANT FOR RENT APPROVED FOR U.S. GOVERNMENT MEAT INSPECTION
New modern two bed kill floor. Cooler capacity up to 100 hd. daily kill. Plant can be easily enlarged, including beef boning. Near large supply of feed cattle. Advantageously situated halfway between L.A. & S.F.
San Joaquin Packing Co.
P.O. Box 487, Kernan, California.
Telephone Fresno AD. 7-4320.

SMALL PLANT FOR SALE: Kill 60 hogs, 15 cattle weekly plus custom work. Operating profitably. 2 large coolers, large freezer, kill and cutting room, office, delivery truck. Completely equipped, 20 acres, house, concrete barn, crib, large feed lot. Located in Illinois. FS-457, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

FOR LEASE: Complete new beef kill plant with rendering (three cookers). In heart of Iowa's cattle feeding country, between Omaha and Sioux City markets. Has on the rail kill, rail and truck loading docks, coolers, freezers, pens, etc. 500 to 1500 head weekly kill capacity. Ready to operate, all you need is capital to purchase cattle. Long term lease with your option to cancel. Contact by phone 341-9798. Evenings 553-1885, Omaha, Nebraska.

MODERN PLANT: FULLY EQUIPPED
30' x 65', on land 51' x 155'. Suitable for all branches of meat business except slaughtering. Tracked concrete cooler 25' x 50'. Concrete freezing room 10' x 18'. Retail department 25' x 30' etc. Priced low.

GIANT MEAT MARKET
12625 West Dixie Hwy. North Miami, Florida

THE NATIONAL PROVISIONER, OCTOBER 1, 1960

EQUIPMENT FOR SALE

THE LAZAR COMPANY

brokers • dealers • sales agents • appraisers

1709 W. HUBBARD ST., CHICAGO 22, ILL.
PHONE CANal 6-9200

NEW—USED—REBUILT
MACHINERY FOR MEAT PACKERS—
RENDERERS—SAUSAGE PROCESSORS
and ALLIED FOOD INDUSTRIES

LOCKERS GOVERNMENT INSPECTED LOCKERS MEAT TRUCKS, GALVANIZED RAILS.

TELEPHONE Drexel 3-4500
Chicago, Illinois

FOR A SHORT TIME ONLY: We will sell one Dupps Gambrelling Table, size 5' x 10' with a 28" platform, and scalding vat, size 5' x 8' x 30" deep with platform, complete for \$400.00, subject to prior sale. VOELKER & CO., Terminal Building, 500 East Markham, Little Rock, Arkansas.

USED (ALSO NEW) FRICTION SMOKE GENERATORS FOR SALE. GREGG INDUSTRIES, 763 S. WAYNE PLACE, WHEELING, ILLINOIS
TELEPHONE LE 7-0519

LIKE NEW: One ton insulated truck. Big Boy barrel lift, 1 H.P. compressor. 1 Patty machine. 4 stainless steel sinks. Phone Oak Park, Illinois, Village 8-4406

PRICED TO SELL: Small packer hog killing and sausage manufacturing equipment. L. P. ILGEN, Ice and Cold Storage, Lewisburg, Pennsylvania

EQUIPMENT WANTED

FAMCO 4 INCH SAUSAGE LINKER, GOOD CONDITION, ALSO 2,000 ONE POUND ALUMINUM PANS FOR SCRAPPLE. W-458, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

MISCELLANEOUS

ANDERSON EXPELLERS

All Models, Rebuilt, Guaranteed
★ We Lease Expellers ★
PITTOCK & ASSOCIATES, Glen Riddle, Penn.

HOG • CATTLE • SHEEP SAUSAGE CASINGS ANIMAL GLANDS

Selling Agent • Order Buyer
Broker • Counsellor • Exporter • Importer

SAMI S. SVENDSEN
407 SO. DEARBORN ST., CHICAGO 5, ILL.

BARLIANT'S WEEKLY SPECIALS

LIQUIDATION SALE
SWIFT & COMPANY
Spokane, Washington
Pre-Sale Inspection October 5
Sale Date October 6

Below is a partial listing of the many fine items to be offered at this sale:

- S-1076—TY-LINKER: mdl. 140A.
- S-1039—TY-LINKER: mdl. 122K.
- S-1040—CHOP-CUT: Boss mdl. 537, 40 HP.
- S-1215—MIXER: Buffalo #3, 700#, 7 1/2 HP.
- S-1009—GRINDER: Anco #766A, 40 HP.
- S-1006—BACON SLICER: Anco #827, w/Anco #304 Shingler, #300 Conveyor, Speed Ranger drive, 6-sta. conveyor table.
- S-1007—BACON PRESS: Anco, 7 1/2 HP. mtr.
- S-1014—FAMCO LINKER: mdl. "G", 4" links, w/portable RT stand.
- S-1071—CLIP APPLIER: Cry-O-Vac mdl. FHCE, w/mdl. CGC Clip Feeder & stainless steel Dip Tank #1078, 20 1/2" x 30 1/2" x 25" deep.
- S-1257—PLATFORM SUSPENSION SCALE: w/Toledo mdl. 2851 head, 3000# cap., 40" x 51" platform.
- S-1202—BENCH SCALE: Toledo style 31-1821FR, 250# dial, 100# cap. beam.
- S-1022—AMMONIA COMPRESSOR: Worthington mdl. UR-SE, 50 HP. mtr.
- S-1206—UNIT COOLERS: (2) Coldjet mdl. 24410ATC, ceiling mounted.
- S-1066—SOAKING TRUCKS: (30) St. John #2671, galv. 5" x 29" x 23 1/2" deep, RT wheels.
- S-1241—SMOKESTICK HANGING TRUCKS: (5) 4-sta., pipe construction, RT wheels.
- S-1031—LOCKERS: (120) B.A.I. type.
- S-1020—AMMONIA COMPRESSOR: York, 50 HP.
- S-1273—SMOKE MEAT TREES: (60) 3-sta. 32" wide.
- S-1209—ROCKFORD FILLER: mdl. "A".
- S-1234—SMOKEHOUSE: galv. 13'4" x 8'10" x 8'6" high, 2-sets. dble. doors. Powers controls.
- S-1240—SMOKESTICKS: (908) alum. heavy & light.
- S-1035—HAM PRESS: Sheet Metal Eng. Co.
- S-1052—MOLDS
158—Globe Hoy #66-S, w/covers.
29—Globe Hoy #109, w/springs & covers.
15—Pre-Slicing 4 x 4 x 24", stainless steel, w/covers
- S-1208—STUFFER: Boss 400# cap.
- S-1254—STICK WASHER: 4' x 3' dia. cyl., 2 HP.
- S-1074—STICK HANGING CAGES: (14) 42" x 48" x 34" wide, 4-station, for 42" sticks.
- S-1211—STUFFING TABLE: 9' straight side x 54" wide w/2" apron, 2 drains, adj. pipe legs.
- S-1018—HAM & BACON TREES: (27) 2-station, 19—open end—32" long
8—closed end—40" long
- S-1011—FROZEN MEAT SLICER: Kaebler, 1 1/2 HP.
- S-1052—AIR COMPRESSOR: Chicago pneumatic mdl. V, 7 x 4 x 4, 15 HP. mtr.
- S-1062—SEMI-LIVE SKIDS: (42) 30" x 60" x 11" high, w/2 RT wheels & wood deck.
- S-1087—FOREQUARTER HOOKS: (44) with stainless steel hook.

DANAHY PACKING CO.

Buffalo, New York

Machinery & Equipment from this fine plant will be sold during October. Watch for our bulletins and ads covering this sale.

SALE NOW IN PROGRESS!

SWIFT & COMPANY
(Plankinton Div.)
Menominee, Michigan
(Contact our Chicago Office—
WA 2-3550)

All items subject to prior sale and confirmation

- New, Used & Rebuilt Equipment
- Liquidators and Appraisers

WRITE FOR FULL PARTICULARS

1631 S. Michigan Ave., Chicago 16, Ill.

Wabash 2-3550

BARLIANT & CO.

CLASSIFIED ADVERTISING

[Continued from page 197]

POSITION WANTED

OPPORTUNITY WANTED: I am presently the part-owner and general manager of a small complete packing plant. Due to the limited future and earnings in our business, I am looking for a sales executive or management position in any related meat business that would present an opportunity for the future. Would prefer the west coast, but location is secondary to the right position. I would be glad to furnish a complete resume on request, or arrange for a personal interview. W-449, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

OPPORTUNITY WANTED: By young, capable and aggressive man with diversified experience in the meat packing industry. Able to assume full responsibility of sausage manufacture, curing and smoking, pork and beef operations. Excellent background in sales training and management. Willing to prove ability with progressive company with permanent future and opportunity for advancement. Presently employed. Can furnish excellent references. Complete resume on request. South or southeast location preferred. W-428, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

WANT TO RETIRE? Want to protect your estate? Want to increase your profits? I am seeking management of a small or medium size packing plant with opportunity to acquire stock as part of salary, or bonus based on profits produced. South or southwest preferred. Successful record as manager and consultant. Present salary \$25,000 but more interested in future than current income. W-405, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

FATS & OILS MANAGER

Successful background in marketing management and sales promotion in the fats and oils field. Experience includes planning and directing marketing programs, analyzing sales problems, hiring and training salesmen, forecasts; budgets, sales service and a successful personal sales record. Skilled in coordinating sales and production activities of multiplant operations. Seeking challenging opportunity in fats and oils sales field.

W-437, THE NATIONAL PROVISIONER
15 W. Huron St., Chicago 10, Ill.

GENERAL MANAGER

EXPERIENCED: As principal officer and general manager of large beef slaughtering plant. Annual sales over \$6 million. Thorough experience in all phases including live stock procurement, plant operations, labor relations, marketing, distribution and extensive experience in carload sales. W-461, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

24 YEARS' EXPERIENCE: In the meat industry, from slaughtering to specializing in sausage and smoked meat processing. Early forties. Desire position with supplier where this practical experience could be used by you and your customers. W-450, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

CAN SPEAK SPANISH

PLANT SUPERINTENDENT: 26 years' thorough practical experience in all phases. Excellent background. Will locate anywhere. W-451, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

MANAGER: Canned meats. 20 years' experience, complete operation. M.I.D. and poultry knowledge of all types of canning equipment. Capable of assuming full charge, willing to relocate. W-438, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

SALES & SALES MANAGEMENT: Aggressive young man desires to relocate. Background and working knowledge in beef carcass and beef primal cut sales and supervision of production. W-447, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

PLANT MANAGER

DESIRES CHANGE. Resume of education and experience furnished upon request. W-427, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N. Y.

CATTLE BUYER

Large and small packer experience. Now on Chicago market. Butcher cattle or yearlings. W-446, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

POSITION WANTED

EXPERIENCED: Sausage factory manager wants a factory to manage on percentage of profit basis. 20 years' experience. Write to Box W-452, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

HELP WANTED

IMPORTED MEATS

Large Company Packers of AUSTRALIAN & NEW ZEALAND FROZEN MEATS currently exporting to the U.S. market now seeking commission selling agents to sell distributive trade from warehouse stocks, on exclusive basis. Good remuneration for right people and continuity of supply to successful men is our policy. Ideal opportunity for canned ham brokers or packinghouse commission salesmen selling jobbers and processors. BONELESS MEATS AND FABRICATED CUTS MANUFACTURED SPECIFICALLY FOR U. S. MARKET WILL BE MADE AVAILABLE IN LARGE U.S. CITIES TO RIGHT REPRESENTATIVES. Reply to Box W-412, THE NATIONAL PROVISIONER, 527 Madison Ave., New York 22, N.Y.

HOTEL and RESTAURANT PROD. DEPT. FOREMAN

MUST HAVE: Top skill and knowledge in portion meat cutting for hotel and restaurant trade, plus some experience in supervising hotel and restaurant production operations, training employees, etc. We are a growing south Ohio full line packer. We will pay a good salary and relocation expenses to the right man who can help our hotel and restaurant department by efficient production operations and cooperation with sales. Write briefly of your experience and salary needs, to Box W-448, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

NIGHT SUPERINTENDENT: Outstanding opportunity. Midwest Ohio packing company needs night superintendent to supervise cattle breaking, shipping and loading departments, 250,000 to 300,000 lbs. per night. Experienced supervising the assembling, packing orders, and loading trucks is essential. This is a good opportunity. Send reference and resume of qualifications to Box W-421, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

SOME GOOD TERRITORIES

for

SHEEP CASING SALESMEN, SHEEP CASING BROKERS.

SAYER & COMPANY, INC.
810 Frelinghuysen Ave.
Newark 12, New Jersey

PROGRESSIVE: Texas packing company desires an experienced hog and beef kill-floor foreman. Age to 45. Only experienced persons will be considered. Exceptional opportunity for aggressive man. Write giving full particulars to W-408, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill., or write to Personnel Manager, Roeglein Provision Company, 1700 S. Brazos, San Antonio, Texas.

SALES REPRESENTATIVE

Now serving the meat industry with other lines, to represent well rated company in the sale of wax impregnated and wax coated board for meat packaging. Top line, easily handled on mechanical equipment. Coverage wanted in Minnesota, Wisconsin, outstate New York and Pennsylvania. W-439, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

PLANT SUPERINTENDENT

PROGRESSIVE PACKER: Seeks plant superintendent, age 28-35. Successful experience in a similar or related position necessary, as well as thorough knowledge of beef and pork operations. Excellent opportunity. Send detailed resume, including salary requirements to W-440, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

PLANT MANAGER: With beef and pork canning experience. Middle west. Terrific opportunity for right man to share in interest of the plant. Must be experienced. W-436, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

SAUSAGE SUPERINTENDENT: To supervise sausage production, smoking and packaging. Excellent opportunity for expert. W-441, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

HELP WANTED

CASING SALESMAN

FOR
OHIO & MICHIGAN
SAYER & COMPANY, INC.
810 Frelinghuysen Ave.
Newark 12, New Jersey

SALESMAN WANTED. Leading packinghouse equipment manufacturer, established national reputation and full line, has excellent opportunity for man with background in meat plant operations or engineering, as sales representative in four-state midwest territory; Chicago headquarters. Permanent. Salary plus commission and expenses. All applications confidential. W-429, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

WANTED: Experienced industrial engineer familiar with all phases of meat packing. Must be able to set up and supervise departmental costs. This is a most attractive position with a salary commensurate to the qualifications. Apply to Box No. W-432, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

GOOD TECHNOLOGIST

MODERN: Meat canning plant located in the Pacific northwest requires the services of an experienced food technologist. Experience with meat products desirable but not essential. Good salary with extra benefits. Please give references. W-459, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

SAUSAGE SUPERINTENDENT FOR SALES WORK

Progressive chemical manufacturer desires experienced sausage man to sell smoke house cleaners and other packing house chemicals. Salary, expenses and incentive bonus. Starting pay for right man approximately \$10,000. W-460, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

SALESMAN: Handling maintenance equipment to dairy, meat packing or institutions field. To represent our well established and nationally advertised products. Cold storage doors, air operated devices for doors, heavy duty hardware, gaskets and hinges, refrigerated truck curtains and freezer door curtains. P. O. Box #163, Reading, Ohio.

BUSINESS OPPORTUNITY

PARTNER WANTED

To manufacture dry sausage in new federal plant. Some capital. W-458, THE NATIONAL PROVISIONER, 15 W. Huron St., Chicago 10, Ill.

MISCELLANEOUS

USDA—GOVERNMENT PROBLEMS? WE EXPEDITE LABELS (8 hour service)

Plans, Construction, Inspection, FDA, Sales Matters. We supply FASTEST GOVERNMENT MARKET information. Low cost: Monthly, hourly, per item.

JAMES V. HURSON
609 Albee Bldg., 1426 G. Street, N. W.
Washington, 5, D. C. Telephone REpublic 7412

SHEEP CASINGS

WE ARE MANUFACTURERS, IMPORTERS AND EXPORTERS OF THE FINEST QUALITY SHEEP CASINGS FOR FRANKFURTERS AND PORK SAUSAGE.

YOUR INQUIRIES ARE SOLICITED.

SAYER & CO., INC.
810 Frelinghuysen Ave.
Newark 12, New Jersey

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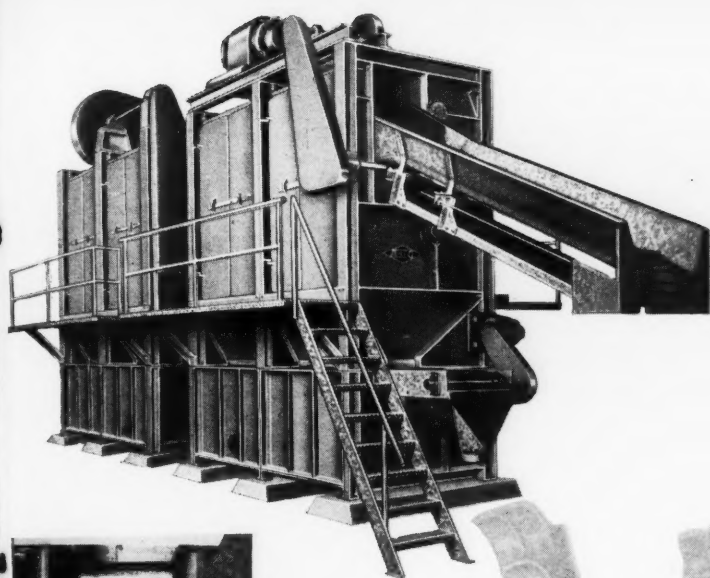
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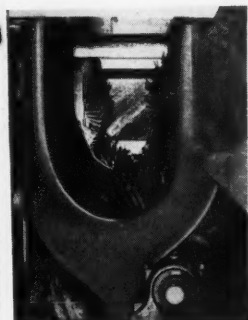
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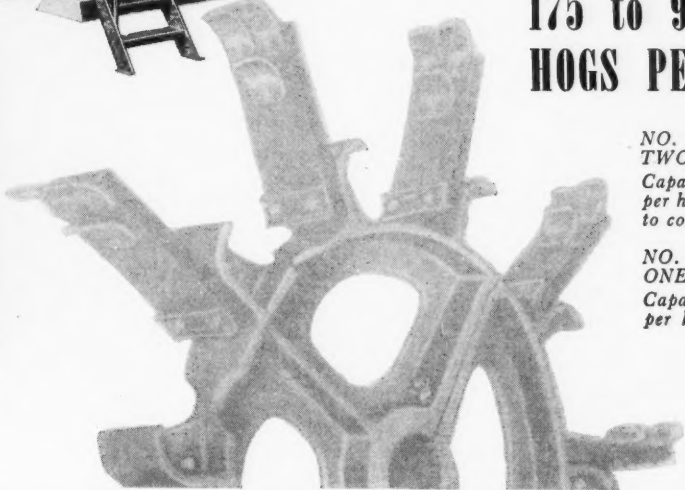


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